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ORIGINAL COMMUNICATIONS.

Interest taken by Legislators on the Subject of Agriculture. By Common Sense. [For the New-York Farmer and American Gardener's Magazine.]

[S. Fleet thanks "Common Sense" for his hints and zeal—excuses himself to the members of our State Legislature by not having the attribute of omnipresence—and hopes an immediate call on them by one of the proprietors will be followed by liberal and patriotic exertions on their part to make the "existence" of the New-York Farmer known, not only in their own families, but to thousands of those of their constituents.]

Mr. Fleet,—Sir: In conversation a few days past with a gentleman who is a member of the Legislature, and a very respectable agriculturist, I happened to make mention of the New-York Farmer, when, to my surprise, I found that the gentleman was ignorant of the existence of such a publication. I hope you will excuse me when I tell you that this looks to me as if you had not paid that attention to the subject which its importance demands. Had I the conducting of such a publication, I would wait on every member of the Legislature, either myself, personally, or by some proper agent, and, if necessary, would present to each a number of the Farmer, and explain the objects it is intended to promote, and the manner in which it is to be conducted.

I do not mean that I would do this as slaves make presents to tyrants, or as a hungry, obscure author dedicates the offspring of his brain to some great character, for the privilege of gracing his work with a pompous, high-sounding name; but I would present it to them as to men belonging to, and making part of, the great mass of the people, and possessing rights, interests, and feelings, in common with their fellow-citizens; and who have been selected for their integrity and good sense to guard and protect those rights, and to promote those interests, as well for the good of every one else in community as for themselves—not as assuming to instruct them, from any supposed deficiency in their knowledge to legislate, but merely to remind them of a subject, which, by some means or other, has thus far, in a great measure, escaped their attention, but which is, both to themselves and their constituents, of the highest and most vital importance. With the slightest hint on the subject, they will want no arguments to prove that agriculture is the basis of national wealth, and of almost every national and individual comfort. But many of them, without the slightest disparagement to their legislative talents, so deep are the impressions of early education, and so strong is the force of ancient customs, are of opinion that agriculture needs no legislative aid—that the mode in which their fathers cultivated the earth, and which is pursued by themselves, is susceptible of little or no improvement, or at least none but what experience will suggest in due season.

But let the attention of these gentlemen be once drawn to the subject, especially by that strongest of all attracting powers, self-interest—let their minds be diverted in a few leisure moments from the long pursued channel of legislation,—and they will discover, by the aid of their own reflections, that though nearly all the other useful arts have recently made such inconceivable advances, leaving agriculture far behind in the van of improvement, yet it is only on the principle that great bodies start with difficulty and move slowly, and not on account of any want of susceptibility to improve in at least an equal ratio with the rest. A moment's candid attention will convince them, that to make two bushels of wheat, or even of potatoes, from the same ground and labor which produced but one before, adds more wealth to the state than to make a bank note of one hundred dollars. They will see from splendid examples, that not one acre in fifty throughout the state produces one half the crop, or one quarter the profit, which it might easily be made to produce.

Let the subject be properly laid before them, and they will readily perceive that, though ages might be required to attain such results by experience, they are come at at once by the light of science. And when they consider, as they will doubtless consider, that while the state is liberally furnished with splendid institutions for the instruction of youth in branches which are rather ornamental than useful, not one is provided, as it should be, for the benefit of that art which is of all arts the most useful, and on which all the others depend, can it be doubted but that those gentlemen whose aim is unquestionably to legislate for the people's good, will take effective measures to promote the progress of agricultural improvement? I should confidently hope it could not.

A single institution, where the physical sciences should not only be taught abstractly, but where their application to the cultivation of the earth should be practically illustrated, would be of more real utility than all the dead languages ever written or spoken. Such an institution, furnished with a pattern farm and suitable investments, if judiciously located and properly conducted, would, in a short time, not only remunerate the state for all its expenses, but become a source of profit. It would also set a pattern for all the other states, which they would be proud to imitate. And besides all its advantages, its effects would all be of purely republican tendency, and would serve in no small measure to counteract the aristocratic effects which many of our present institutions are but too well calculated to produce.

It detracts nothing from the merits of legislators that they have not legislated, or even thought, on the subject. The spirit of improvement almost always sleeps, till awakened by some peculiar excitement; and almost every astonishing display of improvement in the arts may be traced to some accidental circumstance, in itself perhaps trifling. There have been wise men in every nation and in every age, and there were as vast fields for the display of inventive talent two thousand years ago as at present. But it did not lessen the merits of Cadmus, that he did not invent the art of printing, nor of Archimedes, that his genius did not produce the steam engine, nor the art of spinning and weaving by inanimate power. The time was not come, and the exciting cause did not strike them. But the proper season for agricultural improvement has now arrived, and the mechanic arts, as faithful pioneers, have opened and prepared the way. Science has trimmed her lamp to light the first advances; and Genius, awakened by the spirit of enterprize, is already by examples urging on the general march.

The duty now, of course, Mr. Editor, devolves on you, and others engaged in similar publications, to represent the business in its true colors, and place it in its proper light; for we cannot expect the members of the Legislature, with all the multifarious concerns which must occupy their attention, to be ransacking the vast regions of possibility in quest of new subjects; it is enough, if they pay due attention, as they undoubtedly will, to subjects when properly laid before them.

With these hints I leave the subject in your hands, hoping and trusting it will meet the attention its importance so justly merits. Common Sense.

Shell Lime as a Manure. By C. H. Hall. [For the New-York Farmer and American Gardener's Magazine.]

Harlem, Jan. 12, 1835.

Dear Sir,—A severe attack of rheumatism has prevented a reply to your favor of the 22d ultimo; and even now, I am

not at leisure to reply to your inquiries fully, relative to the use of lime on land, owing to my immediate departure for the Legislature. I would briefly say, I have used the shells raked from the lime-kilns of Mr. Knapp, united with peat and mud taken from the salt marsh fronting my farm, (and other matter,) forming a compost found fine and valuable as a manure upon grass land, as well as for almost every purpose required. To fifty ox cart loads of marsh mud, I add fifty bushels of shells, (after the former has remained in a heap some time, to become free of much moisture,) when the mass is well turned over and equally united, and left to ferment for some months, when a second turning is given, and then the manure is found dry, and broken fine, like leached ashes, and fit for use. The above quantity of fifty loads I spread upon two acres of land for wheat, and the result has been favorable. My land is a sandy loam, was much exhausted when taken in hand by me, and is now in good order by manuring with the above compost principally. I obtain from thirty to thirty-five bushels of wheat per acre; and of Indian corn, from fifty to eighty bushels per acre; the latter, however, I generally ash in the hill, in addition to the compost spread over the ground, and harrowed in.

Of the *putty* you speak of, made from the lime manufactured by Mr. Knapp, I have found excellent in whitewashing, and upon out-houses and fences, almost equal to paint commonly used. When at leisure I will give you a statement in detail of the effect of lime upon my land for various purposes, and in the mean time remain,

Yours, respectfully,

CHARLES H. HALL.

New Potato, Convolvulus Batatas. Copy of a communication from L. PAUBELL, Esq. of New-Jersey, to WM. PRINCE & SONS, Proprietors of the Linnæan Botanic Garden, at Flushing. [Communicated for the New-York Farmer, and American Gardener's Magazine.]

GENTLEMEN,—I have this day sent to Messrs. Swords, Stanford & Co. with a request to forward it as soon as possible, a small box, containing four roots, received from Martinico, by Mr. L. du Bereau, a gentleman of this place, as a species of the Convolvulus Batatas, the specific name of which I am ignorant. They were recommended to him as superior to the common sweet potato; when boiled, they are harder than the Carolina kind; *le gout tient un peu de celui de l'igname.* The root, it is said, will keep sound a whole year in the West Indies; those sent have been dug these four months. They do not require a longer time to come to maturity than is necessary for the maturity of the kind cultivated with success in the lower part of this State. The foliage is a very good fodder, and is used as such in Martinico and Guadaloupe.

I think the introduction of this variety of potatoe in the United States, where it is, I believe, entirely unknown, may be of very great advantage; and should the heat in this latitude not be great enough to bring it to perfection, there is no doubt but that its culture in the southern states will be attended with the success it has had in the West Indies.

The possibility of introducing, through your means, a new vegetable into this country, is the only apology I can offer for the liberty I take of requesting you to give a trial to its culture, in hopes that you will be successful in the attempt.

Select List of Fruit. By L. T. [For the New-York Farmer.]

R. Manning, Esq., of Salem, Mass., communicated from the Massachusetts Horticultural Society, to Mr. Fessenden, Editor of the New-England Farmer, the subjoined list of Apples, Pears, Plums, and Peaches, as best adapted to the climate of New-England, and of course to the greater part of New-York, and the Western States. There are doubtless other varieties equally as good as those in the list, but their merits have not been as fully ascertained by the Society. This is the season of the year, indeed the very month, to transmit orders for fruit trees. Those who send orders first are most likely to obtain the best plants. Among the nurserymen, from whom the most of those of the following list can be obtained, are Wm. Kenrick, of Newton, and Hovey & Co., of Boston, Mass., and the most extensive nurseries of this vicinity.

APPLES.

Early Harvest,	Red Astracan,
Red Margaret,	Killham Hill,
Bough,	William's Favorite,
Summer Rose,	Murphy,
Summer Queen,	Hubbardston Nonsuch,
Summer Pearmain,	Ortley,
Drap d'Or,	Porter's Favorite,
Fall Pippin,	Eppes' Sweet,
Doctor or Dewit,	Benoni,
Hawthordean,	American Red Juneating
Pennock's Red Winter,	Stum of Boxford,
Baldwin,	Lyscom,
Lady Pomme d'Api,	Jonathan,
Yellow Bell Flower,	Wine,
Ribstone Pippin,	Yellow Ingestrie,
Rhode Island Greening,	Red Ingestrie.
Roxbury Russet,	

PEARS.

Little Musk,	Saint Ghislein,
Amire Johanet,	Urbaniste,
Madeline,	Wilkinson,
Epargne, (Jargonelle,)	Colmar Souverain,
Skinless,	Burgomaster,
Julienne,	Beurre Knox,
Buffum,	Bleecker's Meadow,
Seckle,	rtlett,
Harvard,	Capiaumont,
Red Bergamot(French)	Cushing,
Chaumontelle,	Dix,
Beurre Diel,	Angouleme,
Long Green,	Summer Thorn,
Rouselette de Rheims,	Andrews,
Prince's Sugar,	Dearborn Seedling,
Lowry's Bergamot, [English,]	Surpasse Vergalieu,
	Naumkeag,
Washington,	Golden Beurre of Bilboa,
Fulton,	Wilbur,
Heathcote,	Cumberland,
Green Sylvanche,	Knight's Seedling,
Johonnot,	Capsheaf,
Napoleon,	Winter Orange,
Passe Colmar,	L'Echasserie.
Raymond,	

PLUMS.

Green Gage,	Smith's Orleans,
Washington,	Bingham,
Prince's Imperial Gage,	Elfrey,
Orleans,	Coe's Golden Drop,
Bleecker's Gage,	Semiana, (of Boston,)
Italian Damask,	Royale de Tours,
Peach,	Pond's Seedling.

CHERRIES.

May Duke,	Late Duke,
Black Tartarean,	Downer's Late Red,
Black Heart,	Black Eagle,
White Biggareau,	Belle de Choisy,
Eavenport,	White Tartarean.
Graffian,	

PEACHES, FREESTONES.

Early Ann,	Washington,
Early Royal George,	Yellow Red Rareripe,
Large Early Red Rareripe,	Teton de Venus,
	Heath, (Kenrick's,)
Coolidge's Favorite,	Wells' Seedling,
Morris' White,	White Blossom, (Snow,)
Old Mixon,	Hoffman's Favorite,
Grosse Mignonne,	Barrington,
Red Magdalen,	Clingstone,
Yellow Rareripe,	Kennedy's Lemon,
Yellow Alberge,	Old Newington,
Malta, Belle de Paris,	Williamson,
Belle de Vitry,	Spanish,
Nivette,	Hyslop's,
President,	Heath,
George Fourth,	Congress.
Van Zandt's Superb,	

To the above I subjoin a list of the same fruit contained in Lindley's Guide to the Orchard, with Mr. Floy's additions. The readers of the Farmer will find the list of great convenience—enabling them to ascertain those that are tested in Great Britian and in this country.

SUMMER APPLES.

Early Red Margaret,	Spring Grove Codlin,
Early Bough,	July Pippin,
Margaret,	Summer Golden Pippin,
Juneating,	Dutch Codlin.

AUTUMNAL APPLES.

Early Nonpareil,	King of the Pippins,
Fall Pippin,	Monstrous Pippin,
Franklin's Golden Pippin,	Old Golden Pippin,
	Æsopus Spitzemberg,
Canadian Reinette,	Padley's Pippin,
Hughes' Golden Pippin,	Malcarle,
Bell Flower,	Pine Apple Russet.
Keswick Codlin,	

WINTER APPLES.

Acklam's Russett,	Ashmead's Kernel,
Barcelona Pearmain,	Cornish Aromatic,
Court of Wick,	Dutch Mignonne,
Fearn's Pippin,	Golden Harvey,
Hanwell's Souring,	Hubbard's Pearmain,
Margil,	Martin Nonpareil,
Norfolk Beaufin,	Northern Greening,
Old Nonpareil,	Ribston Pippin,
Royal Pearmain,	Lady Apple,
Newton Pippin,	Ortley Apple,
Rhode-Island Greening,	Stroat Apple,
	Swaar Apple.
Vandevere,	

A SELECTION OF CHERRIES FOR A SMALL GARDEN.

Arch Duke,	Florence,
Belle de Choisy,	Holman's Duke,
Bigarreau,	Kentish,
Black Eagle,	Knight's Early Black,
Black Tartarian,	May Duke,
Downton,	Morello,
Elton,	Waterloo.

A SELECTION OF PEACHES FOR A SMALL GARDEN.

Barrington,	Neil's Early Purple,
Bellegarde,	New Noblesse,
Bourdine,	New Royal Charlotte,
Catherine,	Noblesse,
Chancellor,	Royal Kensington,
Early Anne,	Royal George,
Ford's Seedling,	Smith's Newington,
Grosse Mignonne,	Smooth-leaved Royal
Late Admirable,	George,
Madeleine de Courson,	Vanguard,
Malta,	Morris's White Free-
Astor Peach,	stone,
Brevoort's Seedling,	President,
Congress,	New-York White Cling-
Emperor of Russia,	stone,

George the Fourth,	Morris' Red Freestone,
Heath,	Red Cheek Malacotan,
Hoffman's Pound,	Washington,
Lemon Clingstone,	Early Sweetwater,
Mammoth Peach,	Early Orange,

PEARS—EARLY, OR SUMMER FRUIT.

Those marked with an asterisk (*) are adapted for Espalier or Quenouille Training.

Cuisse Madame,	*Early Bergamot,
*Early Rousselet,	*Epine d'Ete,
*Fondante de Brest,	Governor Stuyvesant,
Green Chisel,	Jargonelle,
Long-Stalked Blanquet,	Little Muscat,
Madeleine,	Mansuette,
Musk Robine,	*Prince's Pear,
*Robine,	Sabine d'Ete,
*Summer Bonchretien,	Summer Francreal,
*Summer Bergamot,	Summer Rose,
Williams' Bonchretien,	Windsor.

PEARS—AUTUMNAL FRUIT.

*Autumn Bergamot,	*Belle et Bonne,
*Bezy de la Motte,	*Bezy de Montigny,
Bezy Vaet,	*Brown Beurre,
Capiaumont,	Charles d'Autriche,
*Crassanne,	Doyenne Santilete,
Delices d'Ardenpont,	*Duchess ofAngouleme,
*Echassery,	Elton,
Flemish Beauty,	*Gansel's Bergamot,
Gray Doyenne,	*Green Sylvange,
Hacon's Incomparable,	*Louise-bonne,
*Marie Louise,	Moor-fowl Egg,
Napoleon,	Poire Neill,
*Seckle,	Swan's Egg,
Urbaniste,	*White Doyenne.

PEARS—WINTER FRUIT.

Ambrette,	*Angelique deBordeaux,
*Beurre d'Aremberg,	*Beurre Diel,
Beurre Rance,	*Chaumontel,
*Colmar,	D'Aush,
*Easter Bergamot,	*Glout Morceau,
Forelle,	*Easter Beurre,
Gilogil,	*Holland Bergamot,
Passe Colmar,	Royale d'Hiver,
*Saint Germain,	*Spanish Bonchretien.

PLUMS—RIPE IN JULY AND AUGUST.

Blue Gage,	*Blue Perdrigon,
*Early Amber,	Early red Primordian,
GreatDamask of Tours,	*Green Gage,
*Jaune Hative,	*Morocco,
Precoce de Tours,	Violette hative,
Wilmot's Early Orleans,	*Kirk's Plum.

PLUMS—RIPE IN AUGUST & BEGINNING OF SEPTEMBER.

*Brignole,	*Drap d'Or,
Bolmar's Washington,	Early Orleans,
Flushing Gage,	*Fotheringham,
*La Royale,	Little Queen Claude,
Luccomb's Nonsuch,	*Mirabelle,
Monsieur,	New-York Purple,
Orleans,	*Purple Gage,
*Royale de Tours,	Violet Diaper,
*Wheat Plum,	*White Perdrigon.

PLUMS—RIPE SEPTEMBER TO OCTOBER.

*Apricot Plum,	Cooper's Plum,
Coe's Plum,	*Diaper,
Domine Dull's Plum,	Downton Imperatrice,
Goliath,	*German Prune,
*La Delicieuse,	*Mimm's Plum,
*Imperatrice,	Prune Damson,
Prune Suisse,	Red Perdrigon,
*Red Magnum Bonum,	Saint Catherine,
Violet Perdrigon,	Winesour,
*Wentworth,	*White Imperatrice,
White Damson,	*White Bullace,
White Magnum Bonum,	Wentworth.

L. T.

To Keep Mites from intruding on the Shelves in Dairies. By FARMER C.

[To the Editor of the New-York Farmer and American Gardener's Magazine.]

SIR,—If you think best, you may inform those dairy people who read the Farmer, that a bag of red pepper, kept constantly in the vessel where the butter for dressing the cheese is kept, if briskly applied whenever the cheese is rubbed or turned, will effectually *prevent* mites from intruding upon their shelves. Our rule is thoroughly to apply the "bag" as soon as the cheese comes from the press, and continue its use daily for the first fortnight; then once a week for a month; afterwards omit entirely. We have followed this course a long time with extreme success. It improves the flavor of cheese.

The pepper should be soaked in warm water before being immersed in the butter.

Yours, &c. FARMER C——.

Manlius, Jan. 15, 1835.

[We hope to hear often from Farmer C——.]

Economy on Large Farms. By RUSTICUS.

[For the New-York Farmer.]

MR. EDITOR: It has become a common saying, that the farmers of this country till too much ground for profit. This is doubtless correct, considering the capital employed, and the manner in which the farming of this country is conducted. Much, however, of the want of success in conducting large farms, is to be attributed to inattention to small matters, or rather in not making *every thing* productive to the greatest possible degree. Those who conduct extensive business, are very often deficient in bringing all their available force to bear upon the main object. It is the heavy armament only that they consider efficient; and hence their success depends on a few favorable circumstances.

On this subject I submit for insertion in your truly valuable paper the following remarks in a Virginia paper, on the Orange farm. Yours, RUSTICUS.

Wilmington, Del., Dec., 1834.

"Near Baltimore is a farm containing about 400 acres of land of medium quality. The nett proceeds of this farm were, in 1828, somewhat upwards of $5,000; in 1831, about 9,600. Now, my friends, you will probably say, that if you were near a large city, you would do, if not the same, yet much better than you do at present. Perhaps you might, but it is doubtful; and I will tell you why I think so. Simply because it is not so much to the husbandry pursued, as to the *order and system of management* observed, that all farms, whether near to or remote from large cities, are indebted for great or small amounts of income. Moreover, this statement is applicable to only one farm near Baltimore. I will tell you how the above mentioned results are produced, and then if you do not come as near the original as circumstances will permit, why the fault will not be mine. At the *Orange Farm* nothing is lost, nothing is idle. Every thing is turned into money. By attention to *small things*, economising time, making the most of every thing, and gathering up the fragments, the occupant of the Orange Farm makes dollars where other men make cents. Great as are the present improvements, the proprietor constantly bends his attention to others, with what success see in the different profits of 1828 and 1831. N. B. No useless animals are kept."

Suggestions relative to Farmers and Gardeners' Work for February. By S. F.

"Friends, books, a garden, and *perhaps* his pen,
Delightful industry enjoyed at home,
And nature in her cultivated trim
Dress'd to his taste, inviting him abroad—
Can he want occupation who has these?"

Although stern winter rules, with scarcely any diminution of his power during this month, still every one who has a garden, including all the farmers in the country, should remember

"How various his employments whom the world
Calls idle!"——

What! the busy world call him an idler whose industry supplies the living with food? Indeed there is an impression—that he who tills the soil in enlightened lands is, when winter reigns, less active in mind and body than the savage who roams the broad forests in quest of his daily food. Those who indulge this impression have figured to themselves, beings residing in the bleak and dreary *country*, with their cellars supplied with cider, pork, and sauce,—their barns filled with hay, and their fires kept brisk and cracking. They look upon a farmer as one who, in winter, lives to eat pork and cabbage, drink cider, smoke his pipe, and then go to bed. Fortunately and happily they, whose lives in this season of the year have served to spread such an impression, are decreasing in number. It may now be said, that there is, in winter, more employment of mind and body than formerly among farmers and gardeners. Is it not a consequence of the progress of knowledge and the arts, that the active and busy season will encroach upon, and shorten that which has hitherto been considered one of inactivity? Will not the increasing wants of mankind, and the achievements in science and arts, furnish the farmer with new sources of employments? Will not

"Books, a garden, and perhaps his pen,"

in addition to other calls of duty, render the cold months those of the greatest bodily and mental activity? Will not this activity be very conducive to health and happiness? Will it not give a greater relish for the more toilsome labor of the warmer and hotter season? All who best know man, will answer in the affirmative. Doubtless many slothful habits have been contracted and many views engendered, from the want of more mental and bodily exercise or business. Those who are continually active in body and mind, are the least liable to fall off from their industrious and virtuous habits. Providence has so constituted things, that those who assiduously cultivate the whole man, derive the greatest pleasure in the changes of the season, and in the discharge of the duties peculiar to them. With how much more rational, and with how much higher pleasure, will that farmer hail the return of vivifying warmth, who has spent his winter evenings as industriously with his books and pen as he has done the days in

"Delightful industry enjoyed at home,"

than that one who has looked upon the

winter as merely a season of cessation from the labors of summer. Inactivity increases the repugnance to action. This is true, both in reference to mental and bodily exertion. Society abounds in numerous and unhappy examples of both. Those who have discontinued study and writing for any considerable time, well know with what mental struggles the mind is brought back to its former discipline. So it is with him, whose principal duties of the winter have been to eat, drink, and sleep,—he finds it necessary to summon up resolution to undertake vigorously the labors of the opening season. If, therefore, farmers and gardeners would wish to act in accordance with nature, if they wish to pay deference to the indications of Providence, and if they wish to enter upon every change of season, and its every duty, with the greatest possible zest, let them imbibe fully the spirit of the lines at the head of this article. On the supposition that our readers will take our advice, and furnish us with the results of their reading, observations, and practice, we will throw out a few hints on their duties for this month.

HEALTH.—During this and the next month be very careful of the stomach and the feet. Avoid overloading the former, and keep the latter dry, clean and warm. From misusing these portions of the body during the trying months of February and March, many a farmer and gardener have spent April and May on their beds, instead of their fields.

BOOKS FOR DIARY AND ACCOUNTS.—If these are not already furnished, by all means obtain them immediately on reading this article. They will not only furnish you great satisfaction, but will tend very much to insure your success and prosperity.

PLANNING.—Every farmer and gardener should fully revolve his plans, and estimate the efficiency of his means.

PREPARING.—Every possible preparation for spring work should be made this month.

MANURE.—This is the month in which much can be done in preparing manure for early crops. If coarse yard manure is put in large heaps, and not trod down to exclude air, it will undergo a gradual fermentation, and be in fine condition for corn in the hill, and for other purposes. In this way all the manure in the yard may be ready for spring use. If other materials are used with the dung in compost, the heap should if possible be occasionally wet with the liquid manure. Indeed, all the liquid and drainings should go on the heap, and there should be materials sufficient to absorb it.

HOT BEDS. — Manure for hot beds should be kept from drenching rains, and turned over several times. For the beds select a warm dry place, protected from mice. Let the dung be 18 to 24 inches deep. After it has been stirred and heated for two or three days, take off the sash or straw; cover the surface with good soil; on this sow about the last of this month, or early in March, cabbage, lettuce, tomato, and egg-plant. Among plants that may be forced are asparagus, kidney beans, peas, potatoes, radish, cucumbers, and rhubarb or pie plant. In absence of experience, judgment and care will generally give success. There are various and pleasing ways of forwarding vegetables.

PRUNING. — This may be done in February, but nearer the time of the developement of the buds is better. Moderate pruning is best.

TRANSPLANTING TREES.—Should the ground thaw this month, dig around all those trees you wish to remove, and on the return of frost, take them up with the ball of earth on them. If a tree can be removed without disturbing the roots, it matters little at what season it is transplanted.

POTATOES AND BEANS. — Those who have to buy seed potatoes and beans, particularly Lima beans, should be on the look-out for them. Their scarcity will cause them to advance in price until after planting time.

LIVE STOCK.—At this time it is of importance to begin to nurse and strengthen most kinds of live stock: horses and oxen, to prepare them for the season of labor: cows and sheep, to enable them to bring forth vigorous offsprings. The same is necessary for breeding sows, and for poultry.

Lancaster Floral and Horticultural Society.

By M. SAUL. [For the New-York Farmer.]

MR. EDITOR: I intended to have sent the following notice of the meeting of our Society, held September 16th, long since. Some of your readers may be interested in the account.

Lancaster, Dec. 7th, 1834.

"The Dahlias were excellent, manifesting a most decided improvement in the beauty and variety of this most showy of our autumnal flowers, over all former exhibitions. We observed two most beautiful bouquets, composed chiefly of annuals, and grown in the garden of the Patron of this society, the Rev. Mr. Mackreth. The fruit also exhibited by this gentleman claims our first attention; we counted no less than fifty-five sorts of apples and pears. Amongst those of the first rate excellence we observed the King of the Pippins, Yellow Ingestrie, three sorts of French Reinettes, Old Golden Pippin, (a beautiful specimen,) Hughes' Golden Pippin, Hubbard's Pearmain, Hicks' Fancy, Golden Pearmain, Reinette de Canada, Downton Pippin, Adam's Pearmain, Belvoir's Golden Pippin, Reinette Doree, Petit Jean, (a very fine specimen,) Duchess of Oldenburgh, Wheeler's Russet, Sweeney's Non Pareil, Court Pendu Plat, Kirke's Lord Nelson, Court of Wick Pippin, and the Sykehouse Russet, (this last apple, though raised originally not far from this neighborhood, fetches a higher price than any other in Covent Garden market, a sure test of its excellence.) Amongst the Pears shown by this gentleman was William's Bon Chretien, Kaiser, Crasanne, &c., also the Easter Beurre, described in the Pomological Magazine as the very best of the late keeping Pears—also the Dutchesse d'Angouleme, one of the very largest and finest of the late autumn Pears. It may be useful to the public to state the mode which was adopted by this gentleman to procure fruit of the last named kind: it was first suggested by Mr. Saunders, a celebrated grower of pears in Jersey. It must have been observed that many varieties of Pears produce blossoms without fruiting, such as the Dutchesse d'Angouleme, &c.: to remedy this, take a pair of scissors and thin the corymb of flowers, or rather the flower buds, as soon as they are sufficiently long to allow the scissors to pass between them, leaving only four or five blossoms, and preferring those which are the strongest and nearest the centre—this will give them sufficient strength to set from one to two fruits in each umbel.

"Amongst the other contributors to this collection, we must notice some fine specimens of the Chaumontel Pear sent by the Countess of Lincoln. Mrs. Harrison's fourteen plates of apples, some very large and useful sorts. Mrs. William Hinde sent sixteen kinds of useful apples—we particularly noticed some very fine ribston pippins. Miss Robinson, of Halton, a small but very choice collection; this lady also sent a most remarkable kind of fruit described as a Water Melon, from Montreal, and weighing upwards of seventy pounds; it attracted the attention of all present, and was considered as a most wonderful production for one season. Is not this the kind of fruit which is sold in Paris under the name of Poturon, and used by the French people in stews mixed with onions? Mr. T. Salthouse sent fourteen plates of good kitchen fruit. Mr. M. Saul eighteen sorts of desert apples, some of them of the very best sorts, particularly that celebrated apple the Dutch Migneonne; we observed three kinds of American apples in this collection; we are ignorant of their respective merits. Mr. J. Carter eighteen kinds of good kitchen apples. John Stout, Esq., a plate of very fine Alexander apples—a variety of other good sorts, and plates of red and white currants remarkably fine; the gardener of this gentleman deserves great praise for contriving to exhibit such fine currants so late in the season. T. J. Knowlys, Esq., also sent a variety of apples, and some German beans and nine sorts of potatoes; amongst them we observed the Cornichon potato from the Rhine, the black French kidney, Algiers potato, and La Divergente; this gentleman will probably be kind enough to take some opportunity of informing the public whether these kind of potatoes bear the climate well, and are productive. H. Hargreaves, Esq., sent three remarkably fine bunches of grapes. J. Hargreaves, of Penny street, a few sorts of very good kitchen apples. Mr. C. Clark a few sorts of very good kitchen apples."

"My first method is to add 40 lbs. of common potash to 60 lbs. of common salt; my second method, and which I have most generally used, is, to 60 lbs. of common salt add 20 lbs. of dry wood ashes; my third plan, with which I am not quite so well acquainted, but which I considered the most decided in its effect, is to burn the salt in a kiln till it is decomposed, which it will be if properly heated."—[N. Y. Farmer, vol. 7, p. 376.]

Decomposition of Salt.—*Mr. Fleet:* This must incontestibly be called the age of discovery. Although I am now aged, and have been all my life in pursuit of knowledge, it is the first time I ever heard that mixing potash with common salt would decompose it; or mixing wood ashes, or heating; either, I should think, would be ineffectual to drive off the muriatic acid.

Again, it is new to me that soda, (which is the basis of common salt,) has any fertilising qualities; but this also may perhaps be explained in our new books.

These, together with the mixing of vegetables by their roots, of fæcal, or excrementitious deposition, rootlets, and specific food, are altogether new, but may be possibly explained by some of our late chemical authors; and as your correspondent, "A." seems to have them all at command, he will oblige me much by explaining the difficulties under which I labor. R. M. W.

December 18, 1834.

"You know too much."—I am, Mr. Editor, a subscriber to your Farmer, and a mere novice, and perhaps an ignoramus, in the business of farming. One of my neighbors is also a subscriber; but he does not read your work with half the attention and pleasure that I do. He says it contains a great deal of trash, and that it is of no service to him. He is a foreigner, and professes to be a first-rate judge of stock, and to understand fully how all kinds of farming operations should be performed. Compared with his, the neighbors' cows, sheep, and hogs, are absolutely worthless. And yet, Mr. Editor, there are several of us who beat him in the quality and quantity of butter and cheese we make. He and I last week killed our hogs. They were of the same age within a few days. He had six and I five, and yet my hogs weighed 92 pounds the most. I am confident that mine cost at least one-third less than his in fattening them. Most of my information on keeping and advancing hogs I obtained from your work. One of my neighbors, in a conversation with this knowing foreigner, asked him how he came to let me beat him in the weight of hogs? He replied, he did not know how it happened. I can tell you, said the neighbor: you know too much.

New Jersey.

December 25, 1834.

Remarks.—We think it is too much the practice of many foreigners, who are really an acquisition to our country, to set too high a value on their knowledge of stock, &c., compared with that of their neighbors. And what lessens our estimation of their real knowledge, is the unqualified manner in which they attribute total ignorance to those who stand high as farmers by general reputation. This they do fully as much of their own countrymen among us as they do of native Americans.

Geese.—*Mr. Fleet:* Most of the farmers in this section of the Island raise geese, or rather attempt to raise them. Owing to the want of proper attention, or a system, they, like all domestic fowl raised by farmers, are of no profit—consuming and damaging more than they are worth. The male is allowed to run with the female geese; and, in consequence, they often begin to lay their eggs so early, that it is very difficult to keep them from being injured by frost. Generally, not more than half the eggs hatch; and the few and feeble goslings are left exposed to all weathers, and soon die. As far as my experience goes, I am of the opinion that the gander should be kept from the flock until the weather begins to moderate. The eggs should be carried into the house every day as soon as laid, and kept free from damp and cold until the geese are ready for setting. They should be fed in their pens, or not allowed to wander far in quest of food. In fine, it only requires a little care and judgment, to raise a handsome flock of geese almost every year. Any fowl or animal that is worth keeping on a farm, is worth attention. Yours,

C. H.

Oyster Bay, Dec. 15, 1834.

Dung from Hens for Onions.—I was told, Mr. Editor, by a farmer, that the onion crop is the most profitable that can be raised; that manure from the hen-house appears to be the *specific* one for them. It must, however, be used very sparingly, to prevent it from burning up the young onions.

Can any of the readers of the New-York Farmer inform me, if this dung is used extensively in those towns of Connecticut where this crop is largely cultivated? I am a novice in farming and gardening, and hear many things from those in these pursuits, which I, in my limited reading, cannot find corroborated by additional testimony. A Young Man.

November, 1834.

Potash for Manure.—Dear Sir: There is an inferior kind of potash, which comes at 20s. to 22s. per hundred, which is used as manure at the rate of 1 lb. per rod, either dissolved in water, and sprinkled on in a similar manner to that in which the streets are sprinkled in cities, or mixed with earth and spread on with the shovel. I understand it is extensively used. Will you ask for information on this subject through the Farmer? B. F. B.

Long Island, December, 1834.

Qualification of Gardeners.—For six years, Mr. Editor, I have in vain tried to get a gardener who united industry and intelligence with strict temperance. In one or more of these particulars, I have sooner or later found them wofully deficient. In respect to industry and temperance, most of them would do well for a few weeks; and then would exhibit themselves to be such, that I would much rather depend on a daily laborer. Most of our gardeners are foreigners; and most of their intemperate practices are to be traced to meeting their countrymen at public houses. All of them pretend to understand the nomenclature of plants, and most of them to be masters of their business scientifically. I am sorry to say, however, that I have not yet met with a gardener who was a proficient in the sciences connected with his pursuit, or who kept pace with the progress of the science and business of gardening. They rely too much on what they learned in Europe, and depreciate too much the knowledge existing in this country. Many of them read no recent works, nor a periodical of this or foreign countries.

I wish, Mr. Editor, that more of our gardeners would afford employers an opportunity to judge of their qualifications by the productions of their pens in your Gardener's Magazine. They would not, in thus doing, merely evince their ability to write, and their knowledge, but numerous other particulars would be gathered or deduced from their productions. Yours, C.

Philadelphia, Dec. 18, 1834.

Correspondents.—*Mr. Editor:* Although I am much benefitted by the productions of the correspondents to the N. Y. Farmer, and regard many of them as calculated to accomplish extensive good, still I am surprised that there are not more of them—that your table is not literally loaded with them. How do all the farmers, who read your truly interesting work, spend their long winter evenings and their rainy days? It is now unfashionable and disreputable to be seen spending an idle moment at the tavern. In lieu of the former countless hours worse than uselessly lounged away at public houses by half the farmers in the country, it is expected to see them devoted to mental employments. Do not these farmers read? Do they not reflect on what they read, and compare it with their own practice and observations? In doing so, are not a thousand thoughts entering their minds, which they themselves believe would be of service at least to some in the reading community? Where are all our farmers' sons, who are about entering on the stage at this active age? Have they no pride to see a periodical devoted to their own interest, ably sustained by being stamped with the impress of hundreds who can hold a pen as well as the plough?

Where, too, are all our young gardeners? Do they expect to sustain, much less to elevate, their relative standing in mental culture with those of other pursuits, unless they are in the constant practice of reading and writing? If they neglect it, as I did when young, they will have much reason to deplore their remissness.

An Old Gardener.

Williamsburgh, Nov. 15, 1834.

NEW PUBLICATIONS.

The Moral Reformer and Teacher on the Human Constitution. By William A. Alcott, published by Light and Horton, Boston, 1835. Monthly, price $1.

That information which tends to impress mankind with the importance of physical education, and with their moral obligations to give it all possible care and attention, will certainly accomplish much good. There is a large portion of every civilized community, who appear to be struck with astonishment when finding that physical laws, very nature herself, not only sanction, but identify themselves with the performance of moral duties. Some are delighted at the discoveries of harmony between our physical and moral nature, and are incented to the discharge of duty; others are admonished with a voice that sounds to them far more loud and terrific than all the summons of heaven on the

conscience. It is needful, therefore, and highly useful, to disseminate that information which will lead mankind to be good to themselves.

The Editor thus introduces his designs:

"Society groans, says a popular writer, under a load of suffering, inflicted by causes which might easily be removed, but which, in consequence of ignorance in regard to our own structure, and the relation of different parts of the system to each other and to external objects, are still permitted to operate. On this account, he adds, 'persons of much good sense in every other respect, not only subject themselves, unwittingly, to the active causes of disease, but give their sanction to laws and practices destructive, equally, to life and morals.'"

In an article on hastening maturity, it is stated that,

"In general, the duration of animal life bears some proportion to the time spent in arriving at bodily maturity. Man has a longer infancy than almost any other animal; and the period of childhood, as well as every other period of his life, is prolonged in about the same proportion."

He attributes to climate, and the "crowding together of great numbers of the two sexes in factories and other places, where there is little, if any thing, to control their passions," as two of the causes of early maturity in the sense he uses the word. What person who disregards the wholesome rules of society, can read the following and not tremble?

"But no cause tends so effectually, and at the same time so rapidly, to hasten that physical precocity which we have in this essay denominated early maturity, as licentious imaginations, feelings and language. It has already been admitted that climate is by no means powerless. Still we believe that its influence has been, by many, greatly over-rated. Even in Hindostan and Tahiti, where we sometimes find mothers of not more than ten or eleven years of age, and where there are improprieties of conduct at six or eight, innumerable causes exist, besides climate, which tend to produce premature developement. We are informed, on good authority, that 'it is not uncommon to see Hindoo children, of five or six years of age, become familiar with discourse and action which would make modesty turn aside.' The loose conversation, tales and songs, to which they are compelled to listen for the first seven or eight years of their existence; the stories of the dissolute lives of their gods; the solemn festivals so often celebrated, where modesty is totally excluded; the abominable allusions which many of their daily practices recall; the representations on their public and private monuments; and even their worship, in which the most vicious persons act a conspicuous part; these are among the polluted sources from which the youthful mind draws its imagery."

How necessary and lovely does the above paragraph render modesty, delicacy, and chastity!

We think Mr. Alcott's little work is calculated to accomplish much good in families. It will treat on almost every subject connected with the comfort and happiness of man.

NEW PERIODICAL.—The "Horticultural Register and Gardener's Magazine" is the title of a new periodical, the first number of which has just come to hand. This new candidate for favor is published by Mr. George C. Barrett, and edited by THOS. G. FESSENDEN, Esq. the long and well known editor of that valuable publication, the New-England Farmer. Than Boston, no other city in the Union is better calculated for the success of such a work. The highly improved condition of the gardening in the immediate vicinity of Boston, and the interest taken in the advancement of horticultural and agricultural science, by the inhabitants generally, but more especially by the INTELLIGENT part of the community, will, with the well known talents and devotion of its veteran editor, ensure for it a liberal patronage. It is well got up, and its original and selected articles are very appropriate.

We extract the following articles from this new publication.

On the Cultivation of Celery.

It appears to me that a few practical hints on the cultivation of this useful and delicious vegetable might prove interesting and serviceable to many of your readers. I beg to premise that it is a mere detail of the methods I have practised this summer, by which I have raised celery in heads of two and two and a half feet high, of which twelve to eighteen inches are blanched and tender; they are single heads, without offsets, and many four and five inches in circumference. This method has one convenience, which is, that the young plants are raised in the open ground, without glass or hot-bed.

In the beginning of May, later or earlier, as the season may indicate, dig and pulverise well about six square feet of well manured and open ground; water it very lightly, but thoroughly, with a nose on the watering-pot, early in the day, then sow your seed and water again thoroughly in the same way. Cover up this bed lightly with a double layer of Russia mat, which should be dry, and kept down at the corners with stones. The sun striking on the mats penetrates them, and causes a general moist heat to rise from the earth; this is the most favorable state of an atmosphere for the vegetation of seeds, and the celery, particularly if not fresh, is very difficult on this point; the covers should be maintained in as dry a state as possible, (after heavy rains, the upper mat might be changed,) because, if wet, considerable evaporation takes place in the night, which is always productive of cold, and would be apt to rot the tender shoot just piercing the seed; on the other hand, if dry, it prevents the escape of heat when the sun's rays have left the earth, and retains underneath sufficient warmth to prevent any check in the vegetation; in a fortnight or three weeks, according to the season, little yellow and white sprouts will appear; when these are one quarter of an inch high, the upper cover should be removed, that there may not be too much weight on the younger plants; and if the weather continues mild, in a few days afterwards remove the other. If well watered in the beginning, it will scarcely need any further moisture during the first process; but those who practice this method, will hardly be restrained from peeping under the mats once or twice during the fortnight, when, if sultry weather has prevailed, their own judgment will guide them on this head.

The second part of the method is to have another piece of ground, double the size of the former, prepared in the same way, and when the young plants are in their fourth leaf, or about two inches high, take them up and transplant them carefully into this fresh bed, about one inch asunder, first trimming the roots a little.

If well watered and weeded, by the first of July they will have attained sufficient growth to be removed into trenches, which should be prepared in an open, well-exposed spot, by digging them two spades deep and two and a half feet wide, leaving three or four feet distance between the trenches; on this space is to be piled up, like a bank, the earth taken from the trenches. Put about four inches of good manure at the bottom of each trench, and dig it in; take up the plants, and previous to putting them into the earth, trim the roots very carefully, being sure to cut off the end of the tap root, and eradicate all little shoots and radicles, where the heart joins on to the root, as these shoot up and produce that mass of small heads seen in our markets, instead of one large, solid, handsome plant; place them about three inches distance, and water well for the first week. As the plant grows, gently fill in the trench with the earth on each side, taking care not to throw in large lumps, which twist and contort the celery, and spoil its beauty; and continue earthing up until there is a bank above ground as high as the trench was deep.

I prefer digging the trenches east and west, because the bank on each side shades the young plants, in July and August, from the rays of the hot sun, and in September and October, when it is desirable the celery should advance as much as possible, the southern bank, earthed up, imbibes the heat and retains it.

I believe, by covering up the trenches well with pine and savin boughs, it may be dug fresh all the winter; but I have placed mine in an upright position in the cellar, half covered with earth, and kept moist. They appear to suffer but little.

I have been rather explicit, and give my reasons for each operation at the risk of being thought too prolix; but whenever I set earnestly to cultivate a plant, I have generally found directions in books rather too vague, and here and there a link wanting in the chain, which gave me trouble to annex; those therefore who are well acquainted with this process, must excuse this in favor of those who are not so efficient. I. E. T.

N. B.—In our next number we shall give an account of the different varieties of the celery.

Cultivation and Protection of Plants.

SIR,—I hail with pleasure the appearance of your periodical work as the means of increasing the taste in this highly favored country for the useful and ornamental cultivation of the earth. If this increasing taste should result in the formation of central and branch societies for the prize exhibition of flowers and fruits, the occupation of horticulture would afford sufficient interest and excitement to engage the leisure hours of those who, having acquired by industry sufficient wealth, would gladly retire from commerce, could such an amusement be found as would fill the vacuum of minds used to activity and the excitation of rivalry.

I have recently witnessed the erection, in the vicinity of Boston, of numerous villas and country seats, many with aspects due east, and others altogether without protection from the northeast and northwest winds, which are of the longest duration, and the severest in this climate. It is, of course, hardly to be expected, that plants, even of northern habits, can flourish under such circumstances. Many of them, even in their native situations, enjoy local protection from forest moss, or long grass; their beauty acquires for them the eminence of transplantation to ornament the habitations of men; and without the requisite attention to their native soil and habits, is it to be wondered at that they dwindle and finally perish? Such is the fate of the fragrant Magnolia Glauca, the splendid Rhododendron Maximum, the Kalmia Latifolia, and many others which are brought and transplanted by cartloads, every year, at a useless expense and vexation.

My first care in selecting a spot for a house and garden, would be to secure the shelter of some rising ground from the rude northern blast; and then to form an additional barrier by planting a belt of evergreen trees, from fifty to one hundred feet in depth, such as the red cypress, commonly called the Savin, intermingled with the varieties of evergreen fir, and those oaks which retain their foliage during the winter. The red cypress of all sizes abounds in this vicinity, and may be easily transplanted of any size, by digging a trench in the fall all round the tree, undermining gradually, and when the first frost hardens the earth about the roots, so that it will move without exposing them, it may be lifted and placed in the hole previously dug to receive it, taking care, if the frost should prevent its being properly filled in and fixed, to fill up with straw or litter the tree to a stake, so that it be not blown down.

With such protection I doubt not that the Magnolia and Rhododendron would retain their foliage during a moderate winter; the light and elegant green of their leaves, contrasted with the dark colors of the fir and cypress, would add considerably to the charm of a winter landscape.

If, in addition, this belt could be bordered inside with a close-cropped hedge of Privet, or Thorn, the shelter would be rendered inefficient for herbaceous plants interspersed amongst the above; for this purpose I should recommend the formation of a border entirely of peat earth to the depth of three feet, in which might be planted the hardy species of Magnolia, the Rhododendrons, Azaleas, Kalmias, and a host of others, which prefer this earth on account of its obstinate retention of moisture. To run over the surface between these may be placed the very fragrant Mitchella ripens, and Epigea ripens, (Mayflower,) the Gualtheria procumbens, (Checkerberry,) with its lively red berry, which plants now "waste their sweetness on the desert air," and are all to be found in the vicinity of Boston.

In very severe winters the boughs of the cypress laid in such a border would be of considerable use in preserving plants of high and shrubby growth, but for those of humbler pretensions, six inches of Sphagnum, (the bog moss,) were preferable, and, indeed, even in the summer this latter covering would protect them from the scorching and drying rays of the mid-day sun; and as all mosses, however dry, immediately recover their verdure on the application of moisture, and retain it for some time, the appearance would be far from unsightly. I. E. T.

December, 1834.

NEW-YORK FARMER.

FEBRUARY 1, 1835.

The following letter and postscript from a subscriber, which we admit to be just in its censure, and believe we shall not be deemed arrogant in claiming it to be just in its praise, is so business-like, and to the point, that we give it entire.

The appendix and title page are forwarded with this the February number. The communications accompanying the *advance payment* for the ensuing volume, render it doubly valuable. We desire every subscriber to follow the example.

Messrs. Minor & Challis.—I send you enclosed $3 for the New-York Farmer, &c. for 1835; you will place it to my credit, and forward accordingly. Your subscribers had the promise, at the commencement of last year, of receiving an appendix of eight additional pages to each number if paid in advance. I have received 88 pages, or for the first 11 numbers; the number for December has no appendix, or table of contents for the volume. I presume they have been published, but through mistake have not been duly forwarded. You will please to see this *right*: as it now stands, the 7th volume is not in perfect condition for binding.

Yours, &c. respectfully,

J. V. H. C.

Manlius, Onondaga county,
Jan. 22, 1835.

P. S.—Permit me to say I am highly pleased with the able manner in which the Farmer has been conducted. I would gladly have many more of our farmers give it patronage. The most general excuse for not taking it is, they "*cannot afford it.*" Those who take papers, and but one, prefer a political, or one embracing the common occurrences of the day, (strange too.)

Crops and Weather for January.—The snow which fell last month formed a covering to winter grain, and we presume a protection from the severity of the weather in the early part of this month. As such extreme cold very rarely occurs, farmers should notice those portions of their grain ground uncovered with snow, and compare its growth with that covered with snow. Observations should be made, and recorded, on fruit and forest trees, indigenous and exotics; and also, on grasses and on animated nature.

In New-York City. — On Wednesday morning, January 7th, 6 o'clock, the thermometer was 7 degrees below zero. The succeeding day thermometers indicated 10 to 14, below zero. The passage of vessels up the narrows was interrupted for a short time. Ferry boats crossed the rivers every day.

On Saturday, the 10th, the weather moderated. On the previous day people crossed from this city to Brooklyn on the ice.

Since the termination of the severe cold, the weather was mild and pleasant up to the 23d, freeing the harbors of ice.

Accounts from every direction speak of the cold on Sunday and Monday morning as nearly or quite unprecedented. On the 10th of February, 1817, we are told the mercury fell in this city (New-York) to 10 below zero; and it is believed there has been no colder weather since. The proximity of the sea probably has an effect to moderate the severity of the weather in some degree.

In Albany.—The Albany Argus of Jan. 5th says, "Yesterday was undoubtedly the coldest day that has been experienced in this city for the last half century. We have taken some pains to ascertain the state of several of the thermometers.

At the Academy, higher part of the city,			
7	A. M.	23	degrees below zero,
9	"	20	do. do.
10	"	17	do. do.
12	M.	8	do. do.
1	P. M.	2	do. do.
2	"	1	do. above zero.
3	"	2	do. do.

At sun-down the mercury fell below zero. In the lower parts of the city, the cold was still more intense.

At the Manor-House, Gen. Van Rensselaer's, at 6 A. M. thirty-two degrees below zero!

At Gen. S. Van Rensselaer, jr.'s, at half past 7, thirty-two degrees below zero.

At Mr. Edward Brown's, in Steuben street, 7 o'clock, thirty-one and a half degrees below zero. At 8 o'clock, thirty and a half degrees below zero. This is an old and standard thermometer; and the mercury on this occasion was four degrees lower than by the same thermometer on the cold day in 1817.

The thermometer at this office, with a western exposure, was 25 degrees below zero at 8 o'clock A. M. At sun-down, 3½ below.

The Albany papers state that the coldest weather in that city on record, prior to Saturday the 3d inst., was on Sunday, 21st January, 1827, when the mercury fell to 23 below zero: 9 degrees higher than last Sunday.

In New-Haven. — A gentleman from New-Haven states that on Monday morning the thermometer stood in that city at 23 below zero, which was colder than had been known there since 1780. There was also an unusual body of snow upon the ground, averaging about 18 inches deep. The harbor was frozen over, but the steamboats were able to work their passage through.

In Hartford.—In Hartford, as we learn from the Courant, the thermometer, at ½ past 7 on Sunday morning, stood at 25 below zero; ½ past 8, at 23 below; 9 P. M.

15 below; and on Monday morning, 27 below.

In Boston.—The Boston Post of Monday says: "The thermometer sunk to nine degrees below zero yesterday morning at 7 o'clock, and stood at seven below at 11 A. M. The harbor is frozen over down as far as Fort Independence—three miles from the city."

A letter from Mr. Briggs, of the Boston Mechanics' Reading Room, dated Boston, Sunday evening, January 4, says:

"The thermometer at sun-rise this morning stood 15 deg. below zero; at 8 o'clock, 11 do. do. At Worcester this morning, 10 do. do. 2.

Our inner harbor is entirely closed, and much floating ice below. Several vessels have attempted to get up, but were obliged to come to anchor. The Chelsea ferry boats got up their steam in order to make their usual trip this morning, but were unable to proceed. The ground is covered with about a foot of snow; of course we have excellent sleighing, but the snow robs us of the service of our Railroads—the cars won't budge an inch."

In Portland.—The Portland Courier of Saturday says: "Our harbor has to-day been shut over with ice, which does not occur once in several years."

In Washington City.—The National Intelligencer of Tuesday says "The Potomac froze over on Saturday night, and on Sunday night froze so hard that carriages might have passed over it yesterday. The cold still continues. Our navigation is probably closed for the season."

A letter, dated Washington, Monday, January 5th, says: "The weather is the coldest that we have ever experienced here. This morning, at sunrise, the thermometer indicated 16 degrees below zero, at several distant parts of the city. The superintendent of the Patent Office, Mr. Craig, who has kept a Journal for forty years, says that this is the greatest degree of cold that he has ever recorded."

In Baltimore.—An accurate observer of the weather in Baltimore for sixteen years past, states that during that whole period the thermometer has not been so low by several degrees as it was last Monday morning. The same remark is applicable to the temperature at Washington, as will be seen from the letter of our correspondent.

In Montreal.—A gentleman who arrived here a day or two since from Montreal, states that the thermometer in that city had been as low as 35 below zero.

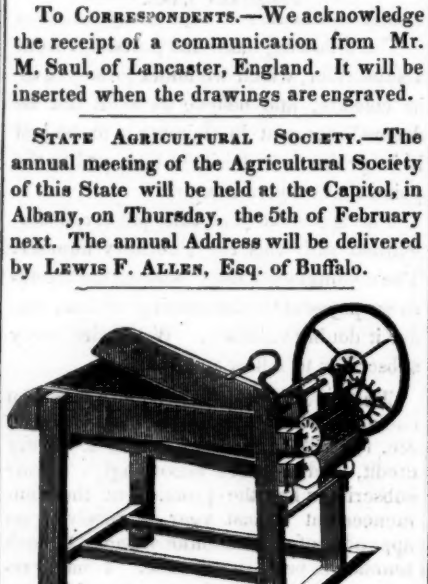
Harbors. — The harbors of Portland, Newburyport, Boston, New-Bedford, New-Haven, Philadelphia, Baltimore, and Washington, are frozen over.

The Thermometer at different places.—The lowest point of temperature reached at Saco, Me., was 28 below zero; Portsmouth, 20 do.; Salem, 17 do.; Newburyport, 13 do.; Lowell, 24 do.; Concord, Mass., 27 do.; Dorchester, Lower Mills, 22 do.; Boston, 15 do.; Worcester, 19 do.; Hartford, 27 do.; New-Haven, 23 do.; Goshen, N. Y., 32 do.; Albany, 32 do. (within 8 degrees of the point where mercury freezes;) New-York, 5 do.; Newark, 13 do.; Philadelphia, 4 do.; Baltimore, 10 do.; Washington, 16 do.; At New-Lebanon, in Columbia county, the thermometer stood on Sunday morning at 7 o'clock, at 35 degrees below zero. A letter from there, in the Argus, says: "One of my neighbors looked at his thermometer, (made by Kendall, and warranted correct,) which is graduated at 40 degrees below zero, at 5 o'clock, and found the mercury had fallen somewhat below the graduation, but could not see precisely on account of the clasp around the tube, near that point. The mercury appeared to be congealed, and for some time immovable. I believe 40 degrees below zero is the point at which mercury is said to congeal. If we have really got jogged into Lapland, we must provide ourselves with alcoholic thermometers. The mercury fell many degrees lower in this valley than it did on the surrounding hills. The atmosphere was not agitated in the slightest degree."

At Utica, at 5 A. M. thirty-four degrees below zero; at 8, 27 below. At Troy, at sunrise, thirty-two degrees below zero.

To Correspondents.—We acknowledge the receipt of a communication from Mr. M. Saul, of Lancaster, England. It will be inserted when the drawings are engraved.

State Agricultural Society.—The annual meeting of the Agricultural Society of this State will be held at the Capitol, in Albany, on Thursday, the 5th of February next. The annual Address will be delivered by Lewis F. Allen, Esq. of Buffalo.



Green's Straw Cutter.—This is the most simple and efficient machine of the kind that has yet been offered to the public. It is made very strong, and not liable to become injured, nor to get out of order. The apparatus consists principally of two cylinders; the upper one is of iron, having the requisite number of knives secured in grooves. The under cylinder is of lead, and can be raised or lowered, so as to have the knives merely to come in contact with it. It will be perceived that the knives perform the double operation of cutting and feeding. All that is necessary in operating is to put in the straw, and turn the crank. After the straw is once cut, it can be put in again, and cut, with increased rapidity, the second time. More than double the quantity can be cut in the same time by this than by any other machine, used in this section of the country.

This straw cutter may be had of the agents, H. Huxley & Co. 81 Barclay street.

I set a man at the crank, and with the hay close to the machine commenced feeding. With my utmost exertion, I could not keep it regularly supplied. In *five minutes* we cut *eleven bushels*, heaping measure, of hay. Had it been fed according to its power of execution, one-fourth more would have been cut. Had I used straw instead of hay, the quantity cut in the above time would have been as great, as it is more easy to supply the machine without interruption. It cuts corn stalks with rapidity, particularly small ones. The box is made large, and by putting a good deal of hay in at once, or by having it close to the machine, one person can feed it and turn the crank at the same time. S. F.

Bone Dust.—Mr. Britton, of Elizabethtown, N. Jersey, wishes for information on this subject. In the N. Y. Farmer, vol. vii. he will find all that will probably satisfy him. It is manufactured by Mr. Ogden, of Brooklyn, and by Mr. Hornby, 9th Avenue, of this city. Price, 30 to 40 cents per bushel.

Produce of One Acre of Land.—There are hundreds of families in our country whose means of obtaining a living would be greatly increased by a judicious management of a small piece of ground. Even as a recreation from other daily pursuits, the income and comforts of a family may receive no inconsiderable additions. We know of merchants and clerks in this city who obtain, from the ordinary size city yards, a greater variety of flowers, and more vegetables and fine fruit, than can be found in one half the farmers' gardens in the country. The following, from the Maine Farmer, we recommend to the special attention of our readers.

Produce of one acre of land the present season, by Stewart Foster and Wadsworth Foster.

Half a ton of hay, one hundred bushels of potatoes, eighty bushels of russets, greenings, and Baldwin apples, thirteen bushels of pears, twenty and a half bushels of parsnips, eighteen and a half bushels of beets, six bushels of carrots, thirty-five and a half bushels of onions, one bushel of corn, one bushel of beans, two hundred and ten pounds Isabella and Lisbon grapes, two hundred and twenty-three cabbage heads, one hundred bunches of onions, carried to market, ten bushels of cucumbers for pickles, twenty-eight bushels of cider apples, eight pounds of dry sage, eighty-one apple trees in a bearing state, and four pear trees, three bushels of currants, three bushels of turnips, one hundred grape roots raised and sold, and ready to sell next spring, three hundred and thirty-two mulberry trees, fit to sell, and a plenty of green sauce of all kinds for two families.

Kiln-dried Flour.—Mr. Tucker: I question the doctrine of kiln-drying wheaten flour. My experience on kiln-dried Indian meal renders me somewhat sceptical as to the expediency of using the process on any flour or meal. That the kiln-dried meal will keep, there is no doubt; but if the negroes of the southern states and West Indies may be believed, its nourishing qualities are in a great measure destroyed. Kiln-dried corn meal is very similar to saw dust, and the negroes universally complain that they cannot live on it. It would therefore appear that other principles besides moisture are carried off by the heat. Whether this will apply to wheaten flour is yet undetermined, but the process should be adopted with caution. Experience. December 6, 1834.—[Gen. Farmer.]

Address of the Executive Committee of the Rensselaer Agricultural Society.

We are much pleased to record the following address. We hope the Executive Committee will persevere until they arouse, not only Rensselaer, but all the counties in the State. It was designed to come immediately *after* the address of Mr. BLYDENBURGH, delivered before the Society in October last—but it was not received until that was printed. [See page 49.] It does not matter, however; it will not be overlooked by those who take an interest in the agricultural improvements of the country.

TO THE FARMERS OF THE COUNTY OF RENSSELAER.

GENTLEMEN,—We can have no possible object in addressing you, but what must be equally interesting to yourselves as to us. Your calling is the most ancient, most important to mankind, and most conducive to happiness, of any in life; and our country is emphatically more happily adapted to the giving scope to agricultural talent than any other. With these advantages in your possession, it would be an insult to doubt your readiness to avail yourselves of them in the most profitable manner.

But so slow is the progress of human improvement—so prone is man to adhere to ancient customs, and walk in the precise track of his ancestors, that though improvements in almost every other useful art have, for a century past, been making almost incredible advances, and though, even in agriculture, a few men of talent and enterprise, aided by the light of science, have showed the world by fair experiments, that no other art is susceptible of more astonishing advances, and have gained independent wealth by doing it, yet agriculture, in general, has hardly begun to awaken from the slumber of a thousand years.

The native soil of this county is generally of that peculiar quality, that, with a little trouble, may be made to imitate and to equal any other specimen of soil on earth. There is nothing, vegetable or animal, which can grow in this climate, but what can be produced to advantage in this county; and there is nothing now produced in it, of which the same labor, with proper management, would not, generally speaking, produce double the quantity; and even your farms, themselves, might, in a short time, with little or no extra cost to effect it, be made of double their present value. If you doubt this statement, you can have ocular demonstration, by examining plain facts, within less than a day's ride of any part of the county. While many of you are wearing out your lives with hard labor, and your farms by bad cultivation, you can find instances, within a few miles, of farms which, a few years ago, were scarcely worth fencing, but which are now of immense value, and which produce double the quantity, and more than three times the profit, per acre, which your farms, generally, now produce; and this change has been effected without any mysterious operation, or any extra expenditure, but what has been attended with immediate profit.

Can there be a man in this county who would not wish to improve his farm, and his wealth, in the same manner? We trust there is not. "But how," you will ask, "is the knowledge to be gained, by which to make these improvements? We cannot all leave our homes and business, and travel to examine these extraordinary results; much less, can we spend our time to take lessons, or read books on the subject." We answer, join with and encourage the Rensselaer Agricultural Society.

But do no not misunderstand us, Gentlemen, as meaning to invite you to come—to come to us for instruction. We utterly disavow any such arrogance. But human knowledge is chiefly gained by associating and interchanging ideas. By inviting you to associate with us, it is as much our object to gain, as to impart information. Probably, every one of you may know something which is not known to the rest, and which may make an important item in the stock of agricultural science. By meeting together and contributing these items, each one will be entitled, in return, to all the items contributed, without losing his own, for knowledge increases by being divided. Thus by uniting in our endeavors to improve our knowledge on the subject, each one will be benefitted by the efforts of all the rest.

Besides, there are many articles of foreign growth, both animal and vegetable, which would be of importance to possess, but to import which would be attended with too much expense for a single individual; but which, to the whole farming community of the county, would be but a cent or two a-piece, and which would ultimately benefit each one more than a dollar for each cent so contributed. By associating and meeting together, we should not only improve ourselves as agriculturists, but we should improve our acquaintance with each other, with mankind in general, and even with ourselves.

If any proof is wanting to show that this is not mere speculative theory, turn your eyes to those counties in this and the neighboring States where agricultural societies have been established for some length of time, and compare them with those where they have not. In many instances, the value of the land and productions has been doubled, while that of the adjoining counties remains the same.

We earnestly recommend these things to your serious consideration; hoping that upon due reflection, instead of imputing to us any views of sordid self-interest, you will consider the little sum of one dollar a year, and the time spent in meeting with us, as trifling equivalents for the benefits you will receive by honoring us with your names and attendance as members of our society.

BETHEL MATHER, J. J. VIELE,
ALEX. WALSH, H. I. GENET,
DANIEL ROGERS, D. C. NORTON,
H. D. GROVE, PHILIP VIELE,
H. VANDENBURGH, GORDON CORNING.

MASSACHUSETTS AGRICULTURAL SOCIETY. — *Premium Butter.*—The New-England Farmer furnishes us with a report of the committee on premium butter and cheese. The premiums of the Society have been so liberal, that farmers have sufficient inducement to make exertion. There were offered, by 29 competitors, more than 150 tubs and stone pots of butter.

No 1, 6 Tubs, Luther Chamberlain, Westboro', Mass. Very prime, and considered by the committee to be entitled to the second premium of $50. Premium awarded accordingly.

No. 12, 6 Tubs, Wm. Bachop, Barnet, Vt. This lot the committee considered very prime, and justly entitled to the first premium of $100. Premium awarded accordingly. Mr. Bachop had a large lot in the hall in addition to that offered for premium, which the Committee did not examine.

The committee, after a careful examination, awarded the first premium to Mr. William Bachop, of Barnet, Vt. It was with some difficulty they decided between this lot and one offered by Luther Chamberlain, both of which were very prime. They based their final decision on the fact that Mr. Bachop's butter was equal, at least, to Mr. Chamberlain's, and, from the manner it was put down, appeared more likely to keep. His dairy is supplied from twenty-one cows, kept in the usual manner, on grass in summer, and hay and grain in winter—the milk kept in tin pans, and churned every morning, if the weather is warm—the butter-milk is removed by frequent washings in water, and four pounds salt and one pound sugar used for each hundred weight of butter—packed in wooden vessels, and set in a cool place.

The committee found no difficulty in awarding the second premium of $50 to Luther Chamberlain, of Westboro'. The butter from this dairy has long been celebrated. Mr. C. seems to enter into the true object of this exhibition by furnishing a particular description of the manner in which it is manufactured. His letter, though long, is interesting, as coming from a practical man, and the committee think they need not apologize for inserting it entire.

MR. CHAMBERLAIN'S LETTER.

To the Committee on Butter and Cheese of the Massachusetts Society for promoting Agriculture.

My cows subsist entirely on grass in summer. I salt them three times per week. A little before I turn them out to grass in the Spring, I give one quart of cob meal to each per day. I give my rowen to them when I first put them up to hay in Autumn; think my rowen worth more at that season than in the Spring.

Respecting the treatment of milk and cream. My milk is set in my cellar at a little distance from the cellar bottom. The cream should be separated from the milk when sweet, and should be kept cool. I have a cellar ten feet square, and 9 feet deep, in my cellar, where I put ice in hot

weather, and there I can make my cream of a right temperature. I have a stove in my upper cellar, so that in cold weather my cream is also of a right temperature. I churn in summer three days in a week. The butter is taken from the churn as free from butter-milk as possible, then worked with the hand and salted. There can be no ladle to supply the place of the hand. The butter then stands an hour or an hour and a half, when the butter is worked until the butter-milk is entirely expressed; then it is ready to lump. Respecting salt, I always send for the best quality of butter salt—I do not know the name of it. If I get a lot that proves not to be of the best quality, I take it for other purposes, and send again for the best kind, for I think it a very essential thing to have the salt fine, white, and of a good flavor. The butter should be salted according to the taste of those who are to use it. There is a variety of tastes respecting the quantity of salt. I use no other substance in my butter but salt. I think saltpetre a dangerous article in cheese, and should think it would have a bad effect on butter, though I do not know as I ever saw it tried. Respecting preserving butter in summer, the vessels should be thoroughly cleansed, and a little salt sprinkled over the inside of the vessel. It should be kept perfectly tight to prevent the air getting to the butter. When I have kept butter through the summer, I have put it down in white oak casks, and head them up until they were wanted for use; then unhead the casks and put on a lid. From my own experience, I think white oak vessels the best for preserving butter, yet I wish for information from the committee and other gentlemen concerning this thing. Those who buy our butter can best judge what vessels are the best, and if the committee of the trustees of the Massachusetts Agricultural Society will take the trouble to satisfy themselves as to what vessels are best, and recommend them to the dairymen, it will be an advantage. Had I known of your exhibition soon enough I would have put up some in pots at the same time I put down in firkins, that you might have a chance to ascertain which is the better.

Gentlemen, I know you love good butter and cheese by your exertions in offering those liberal premiums, and as you have bestowed a good share of them on me, I feel myself under obligation to give all the information that I can to you. The dairymen want to get rich too fast; this is a great reason why you do not have better butter. At this season of the year the cream ought not to stand on the milk more than 12 hours in order to make good butter; of course we do not get but one half of the cream. There will rise another coat of cream, which may be applied to other uses except butter. It is a practice in all the dairies with which I am acquainted to get all the cream they can, and make all the butter they can, and get as good price as they can; but I see their mistake. Put a quantity of the second skimming of cream to that milk from which the first cream is taken, and it will make about as good cheese as four meal cheese; and I think by not trying to make so much butter, but a better quality, and a better quality of skim-milk cheese, I saved enough the last year to pay my labor on my farm. You cannot expect so nice butter at this season as when we have fresh feed, yet you can see how little variation there is in my butter by that which I now offer for exhibition, according to the numbers, beginning at the first. The butter in boxes was made by hay, and some of it of an ordinary quality, as I could not get at my best hay.

The management of cows is also an essential requisite for making good butter. The cows must be kept so as to be clean for milking, or the butter cannot be nice. Cleanliness and prompt attention to every thing are the indispensable requisites for making good butter.

LUTHER CHAMBERLAIN.

The committee have inserted Mr. Chamberlain's letter at length, as a valuable exposition of the manner in which he makes butter, and as an example for others to follow. That he pursues the best course in its manufacture they can have but little doubt, and they feel certain that in attending as he does to quality rather than to quantity, he secures at once both reputation and profit. No stronger proof can be given of this than the fact that his butter, which took the second premium, sold at auction for a higher price than that to which the committee awarded the first, which could only be accounted for by the fact that purchasers felt certain that in taking Mr. C.'s butter they obtained a first-rate article, as he suffered none that was inferior to come from his dairy.

The third premium of $30* was awarded to Benjamin Fay, of Westboro'. The fourth premium was awarded to Richard Hildreth, of Sterling. The fifth,† to Tho. Wright, of Sterling. It is but justice to state that the two largest tubs in this lot were considered by the committee as equal to any offered for premium. The sixth premium was awarded to Ezra B. Newton, of West Boyiston. There was nothing so peculiar in the modes of making butter by those who obtained the four last premiums as to command more particular notice.

There were twelve competitors for the premiums on new cheese, and but six on those for old.

The committee found no difficulty in awarding the premiums as above stated. There appeared, however, to be no peculiarities in the modes of manufacturing adopted by the successful competitors, that deserve particular mention. From the experience of this year, your committee are convinced of the good effects produced by the offer of these premiums.

The value of the premiums in themselves—the opportunity of the manufacturers selling directly to the consumer with the assurance that the article is good, pronounced by competent judges, and the emulation necessarily produced by bringing together so many specimens, cannot but have a great effect in improving the quality of butter and cheese brought to this market.

All which is submitted for the committee. JOSIAH QUINCY, Jr.

* Being the first for butter under 300 lbs., and over 100 in quantity.

† Being the first for butter under 100 lbs. in quantity.

KIND OF FARMING.—*Mr. Fleet:* I have a small sum, which I have succeeded in laying up—the savings from my weekly wages for the ten years past. It amounts to little more than $1000. A relation and friend of mine offers to sell me his farm, consisting of near 100 acres, for $5000. In my opinion, and in that of others, it is, as he intended it should be, very cheap. He does not require any payment within twelve months from next April; and charges but 5 per cent. interest. I have concluded to buy. Having resided in a good farming district for three years past, and having always taken a deep interest in every thing relating to rural life, I have the impression that care, prudence, industry, and perseverance, will render me successful. I wish to lay nearly the whole of my money out for those things which will produce the greatest possible returns. Manure I have fixed on as the primary object. The farm is adapted to a mixed husbandry; but I deem it important to have some plan, or rather that there is some choice in the kinds of farming. Shall I sell most of my hay, and buy manure, or purchase sufficient live stock to consume it? Shall I purchase improved breeds of cattle, or the best natives, at a fair price? Shall I hire three or four men, and give much attention to root crops? Will it pay for a farmer to devote time and capital to raising garden and field seeds for sowing? Shall I mark out any plan for myself, or make it a rule to follow the practices of the neighboring farmers. A PRINTER.

New-York, Dec., 1834.

REMARKS.—We are of the opinion that it is generally safer for one just beginning farming operations to follow the practice of successful farmers in his neighborhood, until he acquires some experience.

Review of the Brighton Market, for 1834.

ESTIMATED SALES.

13 weeks—ending March 31.			
5078	Beef Cattle,	$208,188	
135	Stores,	3,780	
7131	Sheep,	21,393	
3666	Swine,	15,497	
			$248,868
13 weeks—ending June 30.			
3312	Beef Cattle,	$142,352	
465	Stores,	14,415	
6295	Sheep,	13,912	
3586	Swine,	19,623	
			$190,302
13 weeks—ending September 29.			
6990	Beef Cattle,	$230,670	
5275	Stores,	116,050	
43360	Sheep,	75,880	
6560	Swine,	14,760	
			$437,360
13 weeks—ending December 29.			
21002	Beef Cattle,	$472,545	
12610	Stores,	189,150	
36980	Sheep,	73,960	
14032	Swine,	35,679	
			$770,734

RECAPITULATION.

36382	Beef Cattle,	$1,053,765	
18485	Stores	323,395	
93766	Sheep,	185,145	
27844	Swine,	84,959	
			$1,647,264

	1830.	1831.	1832.	1833.
Beef Cattle,	37,767	33,922	40,087	49,180
Stores,	13,685	15,400	9,886	3,286
Sheep,	132,697	84,453	100,583	90,722
Swine,	19,6[illegible]	26,871	14,697	17,408

THE WINTER KING.

BY MISS H. F. GOULD.

O! what will become of thee, poor little bird?
The muttering storm in the distance is heard;
The rough winds are waking, the clouds growing black;
They'll soon scatter snow flakes all over thy back!
From what sunny clime hast thou wandered away?
And what art thou doing this cold winter day?
I'm picking the gum from the old peach tree—
The storm does'nt trouble me! Pee, dee, dee.

But, what makes thee seem so unconscious of care?
The brown earth is frozen, the branches are bare:
And how canst thou be so light hearted and free,
Like Liberty's form with the spirit of glee,
When no place is near for thy evening rest,
No leaf for thy screen, for thy bosom no nest?
Because the same hand is a shelter for me,
That took off the summer leaves—Pee, dee, dee.

But, man feels a burden of care and of grief,
While plucking the cluster, and binding the sheaf!
In summer we faint, in the winter we're chilled,
With ever a void that is yet to be filled,
We take from the ocean, the earth and the air,
Yet all their rich gifts do not silence our care.
A very small portion sufficient will be,
If sweetened with gratitude! Pee, dee, dee.

I thank thee, bright monitor! What thou hast taught
Will oft be the theme of the happiest thought.
We look at the clouds—while the bird has an eye
To Him who reigns over them, changeless and high.
And now, little hero, just tell me thy name,
That I may be sure whence my oracle came.
Because in all weather I'm merry and free,
They call me the Winter King—Pee, dee, dee.

But, soon there'll be ice weighing down the light bough
On which thou art flitting so playfully now;
And, though there's vesture well fitted and warm,
Protecting the rest of thy delicate form,
What, then, wilt thou do with thy little bare feet,
To save them from pain, 'mid the frost and the sleet?
I can draw them right up in my feathers, you see!
To warm them, and fly away! Pee, dee, dee!

FABRICS OF RAW SILK.—Extract of a business letter to H. Huxley & Co.:

"I am concerned in a small establishment in this place for preparing the raw silk for various fabrics; and can prepare at short notice, tram, organzine, or for stocking weaving, and will furnish it at the lowest rate such articles can be afforded. Should you have any inquiry for any article of thrown silk, you will please direct to me for further information, if required."

Orders may be left at the Seed Store, 81 Barclay street.

SCALDING HOGS.—A gentleman of experience and observation desires us to make known, for the benefit of farmers, a mode practised by him of scalding hogs.

Instead of putting cold water, or ashes, in the hot water, as is generally practised, he washes the hog in cold water previous to scalding it. It matters not how hot the water may be with which the hog is scalded; let cold water be first used in the way prescribed, the hair can be taken off with ease and neatness. No danger need be apprehended of the hair becoming set, as is often the case when this mode is not resorted to, owing to a particular temperature of the water.

The gentleman who communicated to us this mode, says he has practised it for more than 20 years, and has not, during that time, experienced any difficulty in scalding hogs. In dressing a young pig for roasting, he first dips it in cold water, and then in hot, by which process he is enabled to remove the hair with the least possible trouble.—[Wyoming Herald.]

EXTRAORDINARY PIG.—There is, says Mr. M. Saul, in a letter to the editor of the N. Y. Farmer, now living in Yorkshire, an enormous Pig, measuring 10 feet 6 in. long, and stands in height 4 feet 2 in. Weighs 148 stone.

LARGE PRODUCE FROM A POTATO.—Mr. Saul relates to us, that 1582 potatoes were obtained this past season "from one set whole potato."

AGRICULTURAL MUSEUMS.—These are collections of all kinds of agricultural produce and implements, for either a limited or permanent exhibition. They are generally got up by some extensive and public spirited dealer in the articles, aided by contributors. Several exist in Scotland.

The December number of the Quarterly Journal of Agriculture contains an account of one got up by Messrs. Lawson & Son, of Edinburgh. An abridged notice of the articles exhibited occupies 30 pages of that work. We give a few extracts, to convey an idea of the exhibition.

Hunter's Wheat. *Triticum hybernum* var. 1. Grain. Presented by Captain Hunter, Tynefield; grown on the same farm for sixty-five years, without change of seed; weight per bushel 65½ lb. 2. Grain, and on the straw. By Mr. J. Carmichael, Rapploch; grown on a medium clay soil, fallowed and manured with about fifteen tons of farm yard dung per acre: weight per bushel 63 lb.; produce per acre 48 bushels.

Anti-fly Wheat. *T. turgidum.* var. Ears. By Mr. Gorrie, Annat Gardens. This is a very prolific variety; and, when grown on the same field with common wheat, was found to be in ear at the same period, and to suffer nothing from the fly, while every ear besides was more or less affected. It grows from 12 to 18 inches taller than our common sorts, and requires four or five days more to ripen. Mr. Gorrie recommends it to be sown thick, as the straw is small, and does not fill the ground well with foliage. Unsuitable to be followed by grass, on account of its scourging nature.

Blood Red Wheat. *T. hybernum* var. Grain, and on the straw. By Mr. J. Carmichael, Raploch. Grown on a gravelly soil, after turnips; a fine crop; weight per bushel 62 lb. Some of this kind of wheat grown in the neighborhood of Chester, yielded 60 bushels per imperial acre, and weighed 68 lb. per imperial bushel.

Nepaul Barley. *Hordeum Nepalense.* A very early naked barley introduced to this country in 1817; at first known by the name of Nepaul Wheat, and said to ripen two crops in one season. It is quite hardy, and very prolific.

Kildrummie Oat. *Avena sativa* var. On the straw. By Mr. Thompson, Hangingside. Produce 11 bolls per acre; mealed 18 pecks per boll.

Flemish Oat. *Avena sativa* var. Grain, and on the straw. Soil light loam; pastured three years; weight per bushel, 45 lb.; produce per acre, 60 bushels. This oat has been grown fourteen successive seasons on the same farm, without change of seed.

Black Tartarian Oat. *Avena orientalis nigra.* Grain, and on the straw. Soil light loam, after three years' pasture. This variety is said to be very prolific.

Cobbett's Indian Corn. *Zea Mays.* var. 1. Head. Crop 1833. By Mr. Chadwick, South Bridge, Edinburgh. 2. Common and dwarf varieties. Heads. By Mr. Thomas Ireland, merchant, South Bridge, Edinburgh. Both these specimens were grown by Mr. Cobbett, on Normandy Farm, Surrey, in 1833. The common variety produced from eighty to ninety bushels per English acre, and the dwarf variety, which ripens a month sooner than the other, produced 70 bushels.

South American Field Pea. *Pisum sativum* var. On the straw. By Mr. Bishop, Arniston. This variety grows to the height of six feet, is very prolific, and a fortnight earlier than the common field pea.

Purple-top Swedish. 1. By Mr. A. Dudgeon, of Falkland Wood, 4 bulbs; aggregate weight 13 lb. 7 oz.; heaviest, 8 lb. 4 oz. 2. By John Wauchope, Esq. of Edmondstone, 2 bulbs; aggregate weight 13 lb. 7 oz. 3. By O. T. Bruce, Esq. of Nuthill, 3 bulbs; aggregate weight 19 lb. 12 oz.; heaviest 7 lb. 8 oz. 4. By Sir Charles Halkett, of Pitferran, 4 bulbs; aggregate weight 24 lb.; heaviest 7 lb. 6 oz. 5. By Mr. Hamilton, Guillan Links. 6. By the Rev. J. M. Robertson, Livingstone, 3 bulbs; aggregate weight 22 lb.; heaviest 8¼ lb.; raised on a fine dark loamy soil, and manured with a compost of different substances, chiefly horse and cow dung; the distance between the drills 24 inches, and the plants thinned out to 10 inches in the row.

Green-top Swedish. By Messrs. Ronalds and Son, nurserymen, Brentford, 2 bulbs; aggregate weight 8 lb. 15 oz.; heaviest 4 lb. 8 oz. Remarkable for their deep yellow color.

Dale's Hybrid.—1. By Mr. Robert Dale, Libberton West Mains, from whom they derive their name. Selected of a medium size, and on account of their genuine shape. 2. By Mr. Davidson, Largo, Fife, 3 bulbs; aggregate weight 21 lb. 2 oz.; heaviest 8 lb. 6 oz. 3. By Mr. Hume, Fordell, 3 bulbs; aggregate weight 35 lb. 14 oz.; heaviest 7 lb. 13 oz.; seed sown on the 8th and 9th of June; soil and culture the same as of the Swedish mentioned above; produce from 33 to 40 tons per acre. 4. By John Wauchope, Esq. of Edmondstone. 5. By Messrs. William Drummond & Sons, Stirling. 6. By Mr. A. Jamieson, Lauder, 1 bulb; weight 11 lb., exclusive of top and root.

Purple-top Yellow Bullock Turnip.—1. By Mr. A. Dudgeon, Falkland Wood, 4 bulbs; aggregate weight 25 lb. 9 oz.; heaviest 10 lb. 5 oz. 2. By Mr. Skirven, Quarryhole, 3 bulbs; aggregate weight, 20 lb.; heaviest 7 lb. 8 oz.; seed sown on 8th June, on a soft black loam; distance between the drills, 2 feet; plants thinned out to 9 inches in the row; previous crop barley, on the stubble of which 35 cartloads of a sediment from the Edinburgh foul burn were laid in November per acre, and ploughed in with the winter furrow; the land was cross ploughed previous to being ridged for the seed; crop taken up in December; produce, 40 tons per acre. These turnips have been grown for 15 years on the same farm, and from the attention paid in selecting and transplanting those intended for seed, have attained such perfection as to be considered superior to others of the same kind, and generally known under the name of Skirven's purple-top yellow bullock. Mr. Skirven thinks, that this variety approaches nearest the Swedish in point of solidity and nutritious quality; it is also hardy, and stands the winter well.

Purple Kohl Rabi.—1. By Mr. David Ford, gardener, Tyningham, 1 bulb; weight 6 lb. 10 oz.; the seed brought from the Continent by the Earl of Haddington, was sown on 24th May, and on the 11th June the plants were set in rows 2 feet apart, and 18 inches from plant to plant; soil, a light loam, trenched 2 feet deep, but without manure, having been cropped with horse-radish for many years. When the bulb is the size of a hen's egg, it is esteemed a good

kitchen vegetable, and as it can be transplanted with advantage, it is well adapted for filling up blanks which may occur among turnips, mangel wurzel, or carrots

Altringham Carrot.—1. By Mr. Alexander Temple, Falkland, 5 roots; aggregate weight, 8 lb. 4 oz.; heaviest, 1 lb. 15 oz. Grown on soil previously trenched two spades deep, without manure. 2. By Mr. Robert Fowler, Fordel, 3 roots; aggregate weight, 6 lb. 4 oz.; heaviest 2 lb. 4 oz. 3. By Mr. Mackie, Corstorphine Hill, 7 roots; aggregate weight, 17 lb. 1½ oz.; heaviest, 2 lb. 13 oz. Seed sown on 22d March, on ground well dunged the preceding year. 6. By Mr. William Wright, gardener, Portobello. Weight of largest root, 3 lb. 5½ oz.

New White Carrot, with Green Top.—By Messrs. P. Lawson & Son. Cultivated in France for feeding live stock; grows larger than any of the other varieties.

Red Mangel Wurzel.—1. By the Rev. J. M. Robertson, Livingstone. Raised on a plot in the garden, dug one spade deep, and manured from the common dunghill; seed sown in rows two feet apart, and the plants thinned to ten inches separate; during the season they were bladed twice, part of them three times, and afforded supplies to two cows for ten weeks; the roots did not seem to be materially injured. 2. By Messrs. W. and J. Noble, seedsmen, London. Two roots; aggregate weight 36 lb.

Brown Portugal Onion.—1. By Mr. Nicol Cathie, gardener, Airthrey Castle. Two specimens; aggregate weight, 3 lb. 10 oz.; sown upon a slight hot-bed, 19th February, 1833, planted out in the end of April into a quarter of the garden previously trenched two feet deep, and strongly manured, one foot by eight inches from each other. In the growing season, they received copious waterings, regulated by the state of the weather. After practising the above culture for four years, Mr. Cathie is decidedly of opinion, that onions may be grown in our own country as large and mild as those imported from the Continent. Six of the same onions were sent to Sir John Hope, of Pinkie, and after being cleaned, weighed 12¼ lb.

Oxalis Crenata. By Mr. Barnet, Experimental Garden, Edinburgh, and by Messrs. P. Lawson and Son. The tubers of this plant, which are similar to those of the potato, and are said to have a finer flavor, have lately been introduced from South America, but they are of comparatively very small size. The flowers are of a fine yellow, and ornamental in the garden.

Water Meadow-grass. *Poa aquatica.* Grows on the margin of rivers and pools; contains a large proportion of sugar, and is much relished dy cattle.

Italian Rye-grass. *Lolium italicum.* 1. From the agricultural garden of P. Lawson & Son, cut on the 23d April, 1834; grown on soil without manure; height 2½ feet. This plant has been found to sustain in this country the high character given it on the Continent, whence it was introduced by Mr. Lawson. It has been tried in the north of Ireland, and produces abundantly.

Siberian Lime-grass. *Elymus Sibericus.* By Mr. A. Gorrie, Annat Garden, Perthshire. This grass yields an immense bulk of herbage, which is eaten with avidity by cattle. It is particularly adapted for light sandy soils.

Cow Grass. *Trifolium pratense*, var. This plant grows naturally in the rich pastures of Lincolnshire, and from many years' experience, has proved to be of the highest value in permanent pastures. Perennial.

Biennial Tare. *Vicia biennis.* This plant is a native of Siberia, and is of luxuriant growth; its leaves continue green for a long time; it is not much cultivated, but is very deserving of notice.

Prickley Comfrey. *Symphytum asperrimum.* A perennial plant, greedily eaten by cattle, bears cutting well, and yields a large produce.

Specimen of Paper made from the Husk of Cobbett's Indian Corn. By Mr. Thomas Ireland, merchant, South Bridge, Edinburgh. It is remarkably tough and strong, and appears well suited for putting up large packages.

JERSEY ISLAND AGRICULTURAL AND HORTICULTURAL SOCIETY.—Our correspondent, M. Saul, of Lancaster, Eng. has sent us the following, in which our readers will find some interesting particulars.

There was a numerous meeting on Saturday last, Nov. 15th, at the board room in Halkett Place, of the members of this Society, to hear the communication made to the Honorary Secretary, by Sir Herbert Taylor, in acknowledging the reception by His Majesty, of the Society's present of fruits. We have not at present a copy of the letter before us, but having read it attentively, we can state its substance. Sir Herbert announces the safe arrival of the fruit in general good condition, and that His Majesty was not only highly gratified by the attention of the Society, but was much astonished at the samples of the Horticulture of the Island; as he was pleased to express himself, he had not before seen pears and apples of equal size and beauty, particularly the two baking pears weighing 96 ounces, picked from a tree in Colonel Le Couteur's garden. His Majesty was pleased to command Sir Herbert Taylor to express his best thanks to the members of the Society, for this mark of their loyal attention; and to intimate a wish, that plants, or cuttings, or grafts, might be forwarded to him by those members who could furnish the different species from which the fruits had been selected, as he was anxious that his gardeners should have the advantage of cultivating fruit of such excellence. He at the same time added, that not only His Majesty was surprised at this exhibition of fruits, but that his whole Court, then in attendance, expressed their admiration, and were desirous to compete with the Island, by the growth of the different kinds of fruit that had been furnished. Several gentlemen who had contributed towards this present, expressed their readiness to comply with the request in Sir Herbert Taylor's letter, and a handsome offer was made by Mr. Bernard Saunders to send the very plants from which some of the fruits he had furnished had been picked. Independently of Sir Herbert Taylor's letter, there was one from Sir Hilgrove Turner, a recent Lieutenant-Governor of the Island, (to his relation, Mr. Hodges, the Honorary Secretary of the Horticultural Board,) and a member of the Society, expressing the satisfaction that the present had given to the King, and the admiration it had excited among those who had had an opportunity of seeing it. There were several other matters of interest brought before the Board, and especially a valuable communication made by Mr. Le Feuvre of St. Peter's, stating that he had tried the plan recommended by Mr. Knight, which was published at the time in this journal, for planting potatoes, and that he found it to succeed beyond his expectation; for that he had taken twelve cabots a perch, from ground planted on Mr. Knight's plan, when the same seed in the adjoining land, planted in the usual way, only produced six cabots per perch. There was an excellent sample of potatoes produced from seed for the use of the members, which had been liberally supplied by Sir Isaac Coffin; but unfortunately a large portion of his present had been lost, owing to damage by sea water.

GREAT BLAST AT CRAIGLEITH QUARRY.—The long time in which preparations for a great explosion at this quarry have been going on, and the effects that were expected to result from the experiment, by a great saving of labor and expense, in at once dislodging a great mass of rock, and also lessening, if not altogether removing, the risk which attends the blowing up of small portions of rock from the flying fragments, rendered the experiment which took place on Saturday se'ennight, (18th Oct. 1834,) a subject of much interest both in a public and scientific point of view. It having been intimated by bills that the blast was to take place at three o'clock, long before that hour crowds of people were proceeding along the roads leading to the quarry, and by three o'clock every place which commanded a view of the spot was filled with spectators. At the time when the explosion took place, there was no fewer than ten thousand people on the grounds around the quarry; and curiosity was so much excited, that even on the Castle-hill, and also on the Corstorphine hill, a great many people were collected. At half-past two o'clock, the conductor, enclosed in a block-tin tube, 26 feet long, and half-inch diameter, was introduced into the bore. The depth of the bore was 60 feet, and 7½ inches diameter at top, and 6 at the bottom, and was charged with 500 lb. of Sir Henry Bridge's double-strong blasting powder. At half-past three the match was lighted, and in three minutes the explosion took place. The report was not so loud as from a small piece of ordnance; but the effect that was produced was highly satisfactory to all the scientific gentlemen present, and completely fulfilled the expectations that had been conceived by the projector. At the moment of explosion, the great mass of rock appeared to those at a short distance to be forced upwards, and then to rend in large and deep fissures. It is calculated that upwards of 20,000 tons of solid rock have been displaced by this experiment. The plan seems to be perfectly safe and practicable, and, we understand, was conducted and carried through by Mr. Millar, who, in 1824, after the great fire in the Parliament Close, suggested and carried into effect the blowing up of the gable of the high land which overlooked the Cow-gate. Among the scientific gentlemen who were present, we observed Mr. Jardine, Mr. Playfair, Professor Wallace, Professor Forbes, Mr. Stevenson, Mr. Buchanan, and Mr. Grainger. —[Edinburgh Observer.]

TEMPERANCE INSURANCE.—It is estimated that the deduction of five per cent. from the insurances of all the trading and fishing tonnage in the United States would amount to $147,834; or in other words, that "the insurance companies of this country, should they all come into the measure, are willing to give the owners of ships and shippers of property $147,834 in a year, if ardent spirit shall not be used on board the ships." What a comment upon the destructive effects of its use to life and property; what an evidence of the benefits which would result to both from its entire disuse!

Unsuccessful Farming.—A gentleman, whose farm we visited last summer, informs us that he lost so much in one year's operations, that he is obliged to return to the city, and resume his old business. Why will he not give us a statement of the causes of his failures? These will be of service.

Silk-worm Eggs.—*Mr. Editor:* Will you inform me where I can procure a small quantity of silk-worm eggs. Last spring my trees were sufficiently large to feed worms, but on application in New-York, I could find no *unhatched* eggs. Will you inform me, through the New-York Farmer, where a small quantity can be procured?

West Chester Farmer.

Remarks.—They can be had at the seed store, 81 Barclay st., and we presume at others in the city. It is best to get them at this season, or quite early in the spring. All that is requisite is, to keep them in a dry place, free from warmth from the fire or sun.

Leaves and Turf.—*Mr. Fleet:* I have a man employed on my farm this winter. He has not much to do, except to collect materials for manure, to be put in the hog pens and cow yards. Which is better, to dig grass sods, or turf, from the streets, or to gather leaves from the woods, which are at a short distance from the barn, but not very abundant in leaves?

Economist.

Remarks.—We are of the opinion that the top soil, or turf, from the streets would be worth the most.

Remarks on Blindess in Sheep: *By Peter McFarlane, Esq. Surgeon, Gartmore House.*—I observe in the third volume of the Prize Essays and Transactions of the Highland Society of Scotland, edited by the late highly respected Henry M'Kenzie, Esq., quotations from various essays sent to the Society. The Rev. Dr. Singer, an observing and valuable correspondent, thinks that the disease called "blindness" may be brought on by the pollen of flowers, and in winter by the days being sunny and the evenings cold and frosty, as well as from the sheep being buried under snow. Mr. James Hogg states, that "this blindness is brought on by continued fatigue, or long and hard driving;" and, after mentioning some other causes, says, that some bleed them below the eyes, and let some of the blood run into the eyes; yet he states, that "the enjoyment of ease will infallibly cure them in a space of time proportioned to the fatigue which they underwent before."

In June last, I brought from a few miles west of Glasgow, four lambs of the large English or Leicester breed. I purchased here one ewe with two lambs, and one ram, of the Cheviot breed. In the last week of November, two of the four Leicesters became affected in both eyes. One seemed to be blind, and first attracted notice by jumping as if afraid of being laid hold of, when there was nothing near to frighten it. One of the Cheviots that had been brought up near this place, was also affected in one eye.

The eyeballs have a very singular appearance, the whole surface being light blue, like the color of deep salt water viewed perpendicularly in clear sunshine. There was of course no pollen of flowers in the end of November, and neither long driving nor fatigue could have any thing to do in the case, for the Leicester lambs were carefully conveyed in a cart, and the Cheviots had been reared in the place. They were all kept in a good house at night. I should think that cold and wet were the causes of the disease, which was inflammatory.

But my object is more to state what will cure the disease, than to account for its causes. I have stated that the eye has a particular color, and it runs much over the eyelid. To remove this, I asked a neighbor who has had long experience in the management of sheep. He advised, without giving any reason, that the diseased sheep should be cut under the eyes, which is Mr. Hogg's plan. I agreed, and he cut all the three, letting some blood flow into the eye. In three or four days they were well, and have continued so.

This disease, whatever cause may induce it, is inflammation of the eyes; and therefore blood-letting, as near as possible to the eye, is, in my opinion, by far the best and surest method of treatment. It should be performed immediately under the inner angle of the eye, on the side of the nose. The manner of performing the operation is this: Lay the sheep on its back, and keep it there by assistants, then the operator, with a sharp instrument, cuts the blood-vessels on the inner angle of the eye, one or both as the case may be, at about one quarter of an inch below the angle. The wound must be deep, or at least such as to allow the blood to flow freely, and should it not do so at the first incision, he must cut a very little higher or lower. I state this so plainly, because in operating on my sheep, though with a surgeon's scalpel in good order, the operator in one case could not bring blood. I told him to cut a very little lower, which he did, and the blood flowed freely.

I do not understand what benefit can be derived from letting blood flow into the eyes; but the blood-letting itself is certainly efficacious. If it should be convenient or practicable, I would recommend the exhibition of salts, so as to open the bowels freely. As to calomel, which has been recommended, it certainly might be given with advantage; but unless the sheep can be kept in a good house, and protected from cold and wet, I should consider it likely to be hurtful.—[Trans. Highland Soc.]

Cows about to Calve.—Cows which are shortly expected to calve ought to be lodged at night in some convenient place, under cover, for a week or two before calving, as it might be the means of saving the life of the calf, and, perhaps, of the dam likewise. The day and night after a cow has calved, she should be kept under cover, and her drink should be lukewarm. Let her not be exposed for some time to the dampness of the night.

Cows which are near calving, ought to be fed with better and more substantial food than usual. Grain of any kind is now useful, but it should be crushed, bruised, or coarsely ground. If the cleaning of a cow after calving be delayed, it may be promoted, according to Dean's N. E. Farmer, by giving her a pail of warm water, with some ashes in it. Or according to the Grazier's Guide, the only thing to be given is toast and weak wine, or good cider or perry. If wine be preferred, mix it with an equal quantity of water. This toast should consist of four pints of wine and water, and about a pound and an half of bread toasted.

Inflamed teats should be washed with two drachms of sugar of lead in a quart of water. Should tumors appear, apply a common warm mash of bran, with a little lard.

To prevent cows from sucking their own milk, it is said that rubbing the teats frequently with the most fetid cheese that can be procured, is an effectual remedy.

In order that it may be ascertained what is the proper time for cows to go dry, previous to their calving, an account should be kept of the time when each cow is put to bull, so that the cow may be dried off in due season. The following prescription for drying off cows is given in Monk's Agricultural Dictionary:

Take an ounce of powdered alum; boil it in two quarts of milk till it turns to whey; then take a large handful of sage, and boil it in the whey till you reduce it to one quart; rub her udder with a little of it, and give her the rest by way of drink; milk her clean before you give it to her; and as you see need, repeat it. Draw a little milk from her every second or third day, lest her udder be overcharged.—[Complete Farmer.]

To prevent Caterpillars from infesting gooseberry or currant bushes, I would recommend the following treatment:—I will suppose that you have them in rows in a plot by themselves. In the beginning of November, clear all the weeds from them, and give the ground a good coat of dung close to the stems of the bushes; then dig a trench one spade deep right down the middle of the rows, throwing the earth on each side over the dung, so that it may be covered one or two inches thick. In the end of March or beginning of April, fork up the whole with a dung-fork, filling up the trench, and making the whole level, but do not rake it at this time. Be particular in laying on the dung as above, and in forking up the whole in spring, for I apprehend a good deal of the success of the plan depends on this. The time for forking up is just when the buds have fairly opened. The fruit is wonderfully improved by this treatment, and the caterpillar effectually prevented.

The spade should never be applied about the roots of gooseberry or currant bushes, there being nothing more injurious to them. A heavy coat of dung needs not be given every season; but trenching them with a little dung close upon the stem, and forking in the spring, must not be neglected, otherwise the caterpillar will appear. The dung that I have always used is that from old hot-beds.

There is not much danger of making the ground too rich about these plants, as their roots run near the surface, while they produce heavy crops every year, so that they exhaust all the earth within their reach, and therefore stand in need of manure and the free admission of air to their roots, in order to recruit them. A rich sandy loam appears to be the primitive soil of the gooseberry, for in such the caterpillar never attacks them.

In ground not exactly suited to its nature, the gooseberry bush would derive no benefit from the dung being laid about its roots, if the ground were not stirred in the spring. Mr. John Kyle, gardener at Blair-Drummond, in Perthshire, dunged his gooseberries in 1804, laying on the manure exactly in the manner in which I do, but, from want of stirring up, he was not relieved from the caterpillar in the smallest degree, nor was there any perceptible difference in the size of the fruit. Whatever, then may be the theory of the case, the practice is known to be highly beneficial. James Hart, Dublin.—[Trans. Highland Soc.]

HARKNESS' NEWLY INVENTED BRICK-MAKING MACHINE.

Fig. 1.

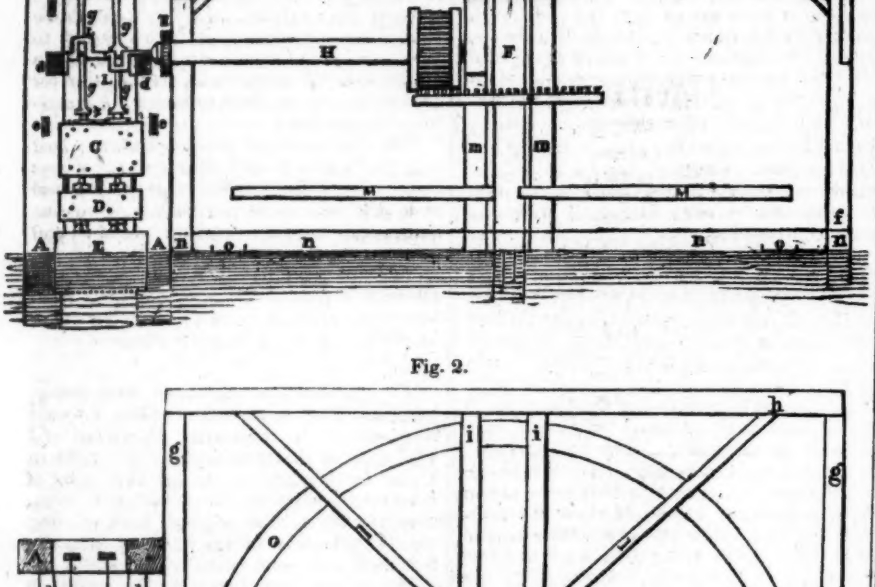


Fig. 2.

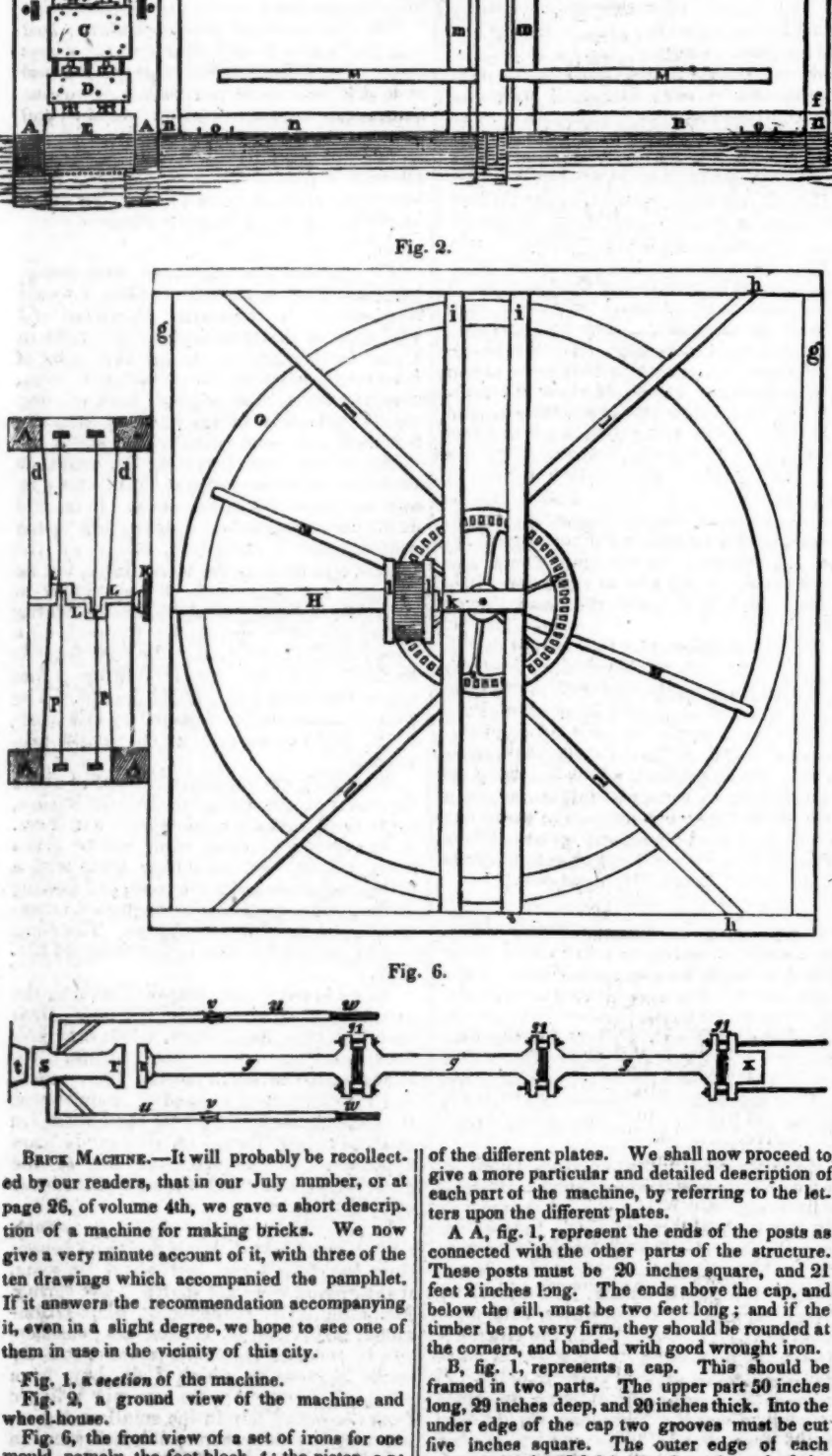


Fig. 6.

BRICK MACHINE.—It will probably be recollected by our readers, that in our July number, or at page 26, of volume 4th, we gave a short description of a machine for making bricks. We now give a very minute account of it, with three of the ten drawings which accompanied the pamphlet. If it answers the recommendation accompanying it, even in a slight degree, we hope to see one of them in use in the vicinity of this city.

Fig. 1, a *section* of the machine.

Fig. 2, a ground view of the machine and wheel-house.

Fig. 6, the front view of a set of irons for one mould, namely, the foot-block, *t*; the piston, *s r*; with the wrought iron rods, *u v w*; the denser, *r g*; the levers, *q q*; and the head-block, *x*.

The above will suffice for a general description of the different plates. We shall now proceed to give a more particular and detailed description of each part of the machine, by referring to the letters upon the different plates.

A A, fig. 1, represent the ends of the posts as connected with the other parts of the structure. These posts must be 20 inches square, and 21 feet 2 inches long. The ends above the cap, and below the sill, must be two feet long; and if the timber be not very firm, they should be rounded at the corners, and banded with good wrought iron.

B, fig. 1, represents a cap. This should be framed in two parts. The upper part 50 inches long, 29 inches deep, and 20 inches thick. Into the under edge of the cap two grooves must be cut five inches square. The outer edge of each groove must be 12 1-2 inches from the end of the cap. This will place the grooves fifteen inches apart in the clear. The under part of the cap is 50 inches long, 20 inches wide, and 5 inches deep. Into this part of the cap two mortices must be made, 5 inches long and 3 wide, which, when the two parts of the cap are put together in the frame, will meet the grooves in the upper part of the cap, above described. Both parts of the cap must have a strong tenon at each end, 15 inches long, to go through the posts. The horizontal grooves in the upper part of the cap, as above described, and as seen in the plate, are to receive each two iron wedges, which regulate the thickness of the brick. The mortices in the lower part of the cap are to receive the head-blocks, which press against the under sides of the wedges.

C, fig. 1, represents what may be called the Denser Clamp. In the side view, seen in the plates, only one of these clamps are visible. They are 46 inches long, 26 inches deep, and 7 inches thick. They are boxed into the posts; the posts being left full in the centre, (a width of 6 inches,) and the boxing cut in 7 inches wide, and 3 inches deep. These clamps sustain the irons which confine the denser, and keep it in its vertical position. The two clamps are confined together by four bolts, the heads of which are visible in the draft. The top of the denser clamps are 75 inches below the bottom of the cap.

D, fig. 1, represents the Mould Clamps. They are 46 inches long, 18 inches deep, and 7 1-2 inches thick. They are boxed into the posts in the same manner as the denser clamps, leaving a space between them of 5 inches. They are confined together in the same manner as the denser clamps, that is by four bolts, with heads at one end and screws at the other. Care must be taken to place these bolts in the positions represented in the draft, or they will interfere with the irons connected with the piston. Into these clamps the moulds are set, by cutting away in the inside, so that they will fit close when the clamps are put in and screwed firmly together. The moulds are fastened down by a bar of iron running across each end of them, and then turned at right angles, down through the denser clamps, with screws and taps at the bottom to keep them firm. These bars of iron should be three-fourths of an inch square; and the cast iron blocks, which form the ends of the mould, should be three-fourths of an inch narrower than those which form the sides. Thus formed, the bar will, in fact, compose a part of the end of the mould. The bar should be made with a joint or hook at one of the angles, so as to be easily separated, when it may be necessary to take out the moulds. If this be not done, the denser clamps must be taken out before the moulds can be moved, which will always be difficult and troublesome.

E, fig. 1, represents the Sill, which is 50 inches long (exclusive of the tenons), 34 inches deep, and 20 inches wide. If it be difficult to obtain timber of the proper size, I can see no special objection to framing the sill in two parts, which will require the pieces to be 17 instead of 34 inches deep. The distance between the sill and mould clamps is 9 inches, between the mould clamps and denser clamps 10 inches, and between the denser clamps and cap 75 inches.

F, fig. 1, represents the Driving Wheel Shaft. This, (if the bottom of it be set on a level with the top of the sill,) must be 11 feet 10 inches long.

G G, fig. 1 and 2, gives a ground and side view of the Driving Wheel. This, if the cog-work be of wood, should be at least eight feet in diameter; if made of iron, it may be much smaller. It should be strong and firm, as for mill gearing.

H, fig. 1 and 2, the Crank Shaft. This must be of the firmest kind of timber, 14 inches diameter, and 15 feet long. One end of this shaft runs on a gudgeon, which rests in a block or gallows, which gallows hangs from the beam *i i*. To the other end is attached the crank, by a wing.

I I, fig. 1 and 2, represents the Wallower or Pinion. This must be precisely one half he size of the driving wheel, whatever that may be.

K, fig. 1 and 2. In fig. 1 and 2 are seen the edge view of the small cog wheel which is attached to the crank shaft near the end next the press. * * * * *

The wheel *k* 2 is supported by a short shaft, one end of which rests in the beam *d d*, and the other in a beam passing between, and supported by, the two small posts last named. Upon the shafts of the wheel *k* 3 are placed four kams, which roll

directly under the centre of the wrists. These kams, as they roll round, press down upon the ends of the levers which are attached to the rods of the piston, and thus raise the bottom of the moulds. The fulcrum upon which these levers rest must be precisely two-thirds of the way from the point where the kams act upon them, to the point where they are attached to the rods. The kams being 12 inches long, the bottom of the moulds will raise six inches, which is the proper distance.

L L L, fig. 1 and 2, represents the Crank. This is a casting of about four hundred pounds weight; and it is somewhat difficult to give a clear description of it, either in language or by a draft. The end towards the driving wheel is composed of a wing, (such as usually forms a part of a wing-gudgeon,) which goes into the crank shaft. The bearing next the wing must be 8 inches long by four and three fourths inches in diameter. The first angle, which must be four and one-half inches square, and so long that it will bring the wrist eight and one-half inches from the bearing just described, that is, by counting from the centre of the bearing to the centre of the wrist. The first wrist, which must be four and one-fourth inches diameter and five inches long, in the clear. The second angle, four and one-fourth inches square and eight and one-half long, counting from the centre of the wrist back to the centre of motion in the crank. The centre bearing, four inches diameter and seven inches long. We have now got through the description of the first half of the crank, (or half next the driving wheel,) with the two first bearings. The second wrist must not be in an opposite direction from the first, but on an angle of 90 degrees from it, taking the centre of motion in the crank as the angular point: or, in other words, when the wrist next the driving wheel is *up* to the highest point of the circle which the wrist describes, then, and at that moment, the second wrist must be on a level with the respective bearings of the crank.

M M, fiig. 1 and 2, the pole, or arm to which the team is hitched.

d d, fiig. 1 and 2. These beams sustain the two outer bearings of the crank. In fig. 1 the ends of these beams only are seen. They should be so framed into the posts that their upper edges shall be 37 in. lower than the bottom of the cap.

f f, fiig. 1, shows two of the corner posts of the wheel house. These should be one foot square and 13 feet long, (besides the tenons.)

g g, fig. 2, the two outside beams of the wheel house. These should be one foot square, and 30 feet long in the clear. *g g*, fig. 1, shows where these beams are inserted in the posts, that is, one foot below the top of the posts.

h h, fig. 1 and 2, the plates of the wheel house, 10 inches square, and 32 feet long.

i i, fig. 1 and 2. In figure 2 are seen the two centre beams which support the upper end of the driving wheel shaft, and one end of the crank shaft. These beams should be at least 15 inches deep and 12 inches wide. They are two feet apart in the clear, and are framed into the posts on a level with the outer beams.

k, fig. 1 and 2, the head block which sustains the upper end of the driving wheel shaft. This block should be 4 feet long, 1 foot square, and boxed into the upper edges of the beams 2 inches.

l l, fig. 1 and 2; these are mere braces, to keep the frame firm in its place, so that the gearing will run steady. Too much care cannot well be taken in the construction of the wheel house to make it firm and incapable of swerving.

m m, fig. 1; these posts sustain the centre beams; they must be 1 foot square, and 13 feet long in the clear. Braces, of at least 6 feet in length, should be framed from these posts to the centre beams.

n n, fig. 1, one of the sills of the wheel house. The sills should be of durable timber, 1 foot square, and long enough to form a square of 30 feet in the clear.

o o, fig. 2, the horse track, which must of course be as large as practicable in a square of thirty feet.

p p, fig. 2, the four pitman rods which run from the levers to the crank, and serve to straighten and bend the levers.

q q q, figure 6, the levers and the denser. The bodies of these are 3 inches square, or as near that shape as the patterns can be drawn from the sand; the joints six inches wide, with projections on the outside of the joints to receive the snibils or hooks which hold the levers together, (*q*, 1.) The convex and concave half circles upon which the levers bend, should be one inch in diameter. The manner in which these circles should be cut, is obvious in fig. 7, which represents an edge view of the levers and denser. The levers should be precisely 36 inches long, counting from the angular points, and the denser 41 inches long; this, when the levers are straight, will give a distance of 9 feet 6 inches from the bottom of the cap to the bottom of the denser, (allowing one inch for the head block.)

r r, fig. 6, the bottom of the denser and top of the piston. The size of these must be the same as the flat surface of the brick, which size will be regulated by the custom of the place, or the views of the builder. It may be well to remember, however, that a brick 9 inches long, 4 1-2 inches wide, and 2 1-2 inches thick, contains a fraction over 100 cubic inches of clay—whereas, a brick 8 inches long, 4 inches wide, and 2 inches thick, contains only 64 cubic inches. It will therefore take less than two-thirds the force to press a brick of the latter than of the former description.

s, fig 6, the bottom of the piston. This should be 6 inches long, and 4 inches wide, with a cavity in the bottom of the right shape to receive a conical projection of the foot block; this conical projection of the foot block should be 2 inches square at the base, and 2 inches high, running to a point in the centre. This shape of the piston and foot block is necessary to make the piston, when it falls, invariably come to the same position. The piston must be cast with a hole through it large enough to receive a cross bar, 2 1-2 inches deep, and 5-8ths of an inch thick. [See fig. 6.] To each end of this cross bar is attached a rod 3-4ths of an inch square. These rods must 19 1-2 inches apart, (from outside to outside,) and firmly braced. There must be a joint in the rods at *v*, and perhaps it may be best to have another immediately below where the rods are attached to the raising levers. The raising levers must be forked near the point where they rest upon the fulcrum, so as to meet the upper ends of the raising rods. In order to have these levers perfectly inflexible, they must be covered on the upper side with a thin bar of iron, which must be spiked or screwed firmly to the wooden part of the lever. The screws at the top of the rods are for the purpose of fastening them to the raising levers, and keeping the work at all times tight and in its proper place. The top of these rods, from the joint at *v*, must be inclined about two inches inward, so as to prevent the raising levers from interfering with each other.

t, fig. 6, the foot block. This should be 5 inches deep, and a little smaller at the top than the bottom of the piston, so that the clay which may happen to fall through, or round the mould, shall not rest upon the block. The bottom of this block should be at least one foot square; but all, except the part which comes in contact with the piston, may be only 1 inch thick.

A machine with two pair of moulds only, will make from fifty to seventy thousand bricks per week. But if the regular market be large, it can, by using a steam engine of 10 horse power, work sixteen moulds, (four on each side of the wheel house,) and make two hundred thousand bricks per week. It will probably be the better way, however, to multiply the number of presses, rather than the number of moulds in a press.

In order to make the best quality of brick, the clay must be pulverized, and rendered completely clear of lumps and small stones. This is easily done when the clay has been thrown up during the winter and frozen. All that is necessary to do with frozen clay is to pass it through a coarse wire rolling screen. This screen may either be turned by hand, or attached to a drum connected with the driving wheel. To screen clay by hand is about the same labor as to make it into mortar. Every manufacturer can have his own plan for pulverizing his clay.

The clay, to be worked to advantage, must be in a dry state—not so as to become dust, but so that it will in a measure lose its adhesive qualities. In this state, when pressed, the air will escape out of it, and it will become solid. But if it be moist, it is impossible to press it—or rather, the water renders it so elastic that it will not "stay pressed." I would advise the manufacturer to connect with his wheel house a large shed, sufficient to protect clay for 150,000 bricks. Into this shed let him wheel clay during the winter, so as to have the whole of it frozen. He will then be able to supply the market in the spring with one kiln of brick as soon as they may be wanted. The balance of the clay required for the season should, during the winter, be thrown up into ridges. It can then be taken into the shed during dry weather, always taking care to have the shed so full that the press may not have to stop during a week of wet weather.

Butter from a Cow.—If the cow is well fed, the average quantity is seven pounds per week for several months after calving. After this time not more than three or four pounds.

Great Britain and her Colonies.—The following article on the "Colonies of Great Britain," is from a new, able, and cheap publication, to appear monthly, entitled "The Agricultural and Industrial Magazine;" a publication in which the doctrine is ably advocated that the interests of the farmer, the manufacturer, and all commercial classes, are identical. The Committee of Management includes upwards of twenty members of Parliament, differing in general politics, but who agree in these great measures—that agricultural produce and manufactures ought to fetch higher prices, that the masters should obtain better profits and the workmen better wages.

"Britannia needs no bulwarks, no towers along the steep,
Her march is on the mountain wave, her home is on the deep."

The *small* domestic and *vast* transmarine empire of Britain may be thus seen:

	Divisions.	Area in square miles.	British subjects.
U. Kingd.	England,	50,520	12,086,675
	Wales,	7,409	803,000
	Scotland,	29,605	2,365,930
	Ireland,	26,798	7,839,469
	Bengal,	306,012	72,000,000
	Madras,	141,323	14,700,000
	Bombay,	64,938	7,000,000
	Ceylon,	27,000	1,200,000
	Penang, &c.	1,317	136,000
	New-Holland,	1,000,000	100,000
	Van Diemen's Land,	24,000	48,720
	Mauritius,	1,000	104,479
	Cape of Good Hope,	120,000	136,375
	Western Africa,	1,082	34,923
	Lower Canada,	205,863	562,980
	Upper Canada,	95,125	250,000
	New-Brunswick,	26,704	94,392
	Nova Scotia,	14,031	139,000
	Cape Breton,	3,125	30,000
	Prince Edward's Isle,	2,159	32,000
	Newfoundland,	35,923	80,000
	Hudson Bay Settlem't,	525,000	2,000
	Jamaica,	6,400	359,000
	Trinidad,	2,400	44,163
	Barbadoes,	166	102,277
	Grenada,	109	28,732
	Antigua,	94	35,678
	Montserrat,	47	7,406
	Dominica,	275	20,038
	St. Vincent's,	131	27,734
	Nevis,	20	12,159
	St. Kitt's,	68	23,922
	St. Lucia,	225	18,351
	Tobago,	44	13,952
	Tortola, &c.	120	10,642
	Bahamas,	312	16,836
	Bermudas,	36	8,920
	Demerara, &c.	70,000	80,124
	Berbice,	25,000	22,965
	Honduras,	10,000	4,839
	Malta, &c.	122	128,960
	Gibraltar,	3	17,024
	Jersey, &c.	—	65,836
	Man,	220	36,000
	Total,	2,824,040	121,829,501

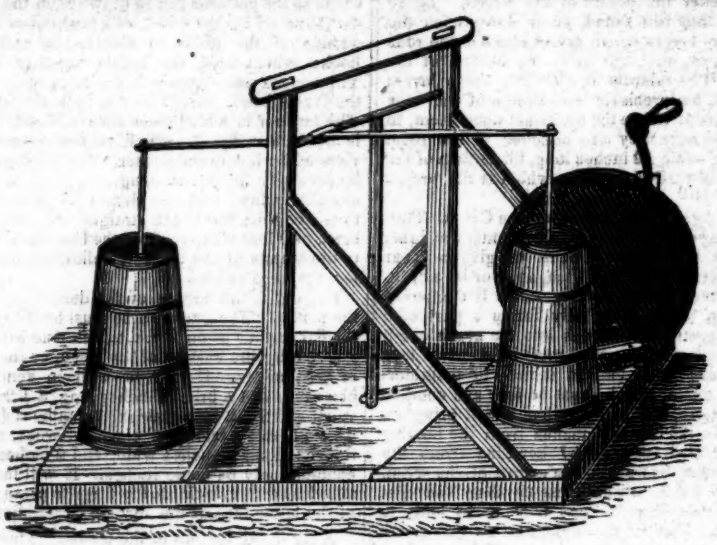
What then has raised England, a small

island in the Atlantic, to the lofty station she now holds! The industry, skill, and moral integrity of her sons, scattered over the earth, forming Colonies in every clime and on every shore from the Arctic to the Antarctic Circle, from the Equator to the Poles, embracing an area of two millions and a half of square miles (or 1,620,000,000 acres,) with a population of more than one hundred million mouths, yielding an annual revenue of nearly £30,000,000 sterling!

When we contemplate this wondrous Empire, on which the solar orb never sets, truly may it be said that the transmarine dominions of this *insular* Kingdom offer to the agriculturist measureless fields for pasture and tillage; to the manufacturer, an incalculable extension of the home market for the disposal of his wares; to the merchant and mariner, vast marts for profitable traffic in every product with which nature has bounteously enriched the earth; to the capitalist, an almost interminable site for the profitable investment of his funds; and to the industrious, skilful, and intelligent emigrant, an area of upwards of two million square miles, where every species of mental ingenuity and manual labor may be developed and nurtured into action, with advantage to the whole family of man. England has no need to manufacture beet-root sugar (as France)—her West and East India possessions yield an inexhaustible profusion of the cane; grain (whether wheat, barley, oats, maize or rice,) every where abounds; her Asiatic, American, Australasian, and African possessions, contain boundless supplies of timber, corn, coal, iron, copper, gold, hemp, wax, tar, tallow, &c.; the finest wools are grown in her South Asian regions; cotton, opium, silk, coffee, cocoa, tobacco, saltpetre, spices, spirits, wines and fruits, are procurable of every variety and to any extent in the East and in the West, in the North and in the South of the Empire; on the icy coast of Labrador, as well as the opposite pole, her adventurous hunters and fishers pursue their gigantic game almost within sight of their protecting flag: and on every soil and under every habitable clime, Britons desirous of change, or who cannot find occupation at home, may be found implanting or extending the language, laws, and liberties of their Father land.

To the most remote, as well as to the nearest sections of the vast Empire thus depicted, it is our intention to direct public attention, being convinced that the colonies of England were raised up for her by Providence, for the purpose of promoting and extending civilization and Christianity to the remotest ends of the earth.

THE CHAMPAGNE VINTAGE of the present year is as follows:—Verzenay 3,000 casks, Verzy and Villers Malmsey 1,500, Relly, Chezney, and Lads, 1,000, Bowzy 1,000, Ambonnay 1,000, Ay 10,000, Mareuil and Acenay 3,000, Haut, Villiers, Dizy, and Cumiers 4,000, Epernay 4,000, Pierny 4,000, Moussy 2,500, Chouly 1,500, Cramant 2,000, Avize 8,000, Oger and Mesnil 16,000, Vertus 2,000; total 64,500 casks, containing 220 bottles each, making in all 14,190,000 bottles.—According to the estimate of the number of bottles which can be procured at the different manufactories, it appears that next year, when this vintage comes to be bottled off, there will be a deficiency to the number of 3,390,000. The manufactory of M. de Poilly can furnish 2,000,000, that of M. Daube 1,500.000, that of M. de Coloret 1,200,000, that of M. de Violaine 1,800,000, that of Messrs. Pallier and Calegois 600 000.—The Auzin factory 400,000, two others in the North 600,000, the four Lorraine factories 2,500,000, and that of Croyeny 200,000; total, 10,200,000. The number required is 14,190,000; deficiency 3,390,000.—[Paris Advertiser.]



Angevine's Patent Lever and Double Churn.

It appears to us that this is an improvement on the hitherto tedious operation of churning. From a close examination of this churn, when exhibited at the last Fair of the American Institute in this city, we are induced to give it our decided approbation. It is manufactured and for sale at 279 Bleecker street, New-York, where also those who wish to manufacture these articles may purchase, on moderate terms, patent rights for states, counties, or towns.

Angevine's Patent Washing Machine.

These washing machines are well calculated to preserve and prevent the wear of clothes, to save time, labor, and expense. They will extract stains and streaks from clothing, which cannot be taken out in any other way except by bleaching. The whole machine is so constructed that a child of 10 or 12 years of age may use it with the greatest facility, being a fluted cylinder rolling on an inclined board, with a pounder hung on a spring attached to it, as represented in the above plate.

The proprietor of the patent washing machine offers it with the fullest confidence to the trade and the public generally, as the best of modern inventions for washing—saving time, greatly lessening labor, and operating with singular facility. It is manufactured and sold by Francis S. Lane, 279 Bleecker street, New-York.

CHRONIC RHEUMATISM.—The Boston Medical Journal strongly recommends for the cure of this complaint, a mixture of equal parts of the balsam of sulphur and spirit of turpentine. Six drops are given, morning and evening, and the dose increased two drops a day until it produces stranguary, when it is dimmished a little, and continued until the disease is removed.

First Annual Report of the Proceedings of the Rensselaer Agricultural Society, being for the year 1834.

On the 14th of January, pursuant to public notice, a meeting was held at the Mansion House, in the city of Troy, when the Hon. HORATIO HICOCK was called to the chair, and JOHN I. VIELE appointed secretary.

The object of the meeting having been explained, it was, on motion of Col. H. I. Genet,

Resolved, That we do now proceed to form an Agricultural Society for the county of Rensselaer, and that a committee be appointed to draft a constitution, and report suitable names for the officers of the society.

The following persons were appointed said committee, viz., Philip Viele, Horatio Hicock, Bethel Mather, Peter Abbott, H. D. Groove, Christopher Van Pelt, H. I. Genet, and Orin Goodrich.

On motion, a committee of five was appointed to draft resolutions expressive of the sense of this meeting, respecting the objects to be gained by association. A. Knickerbacker, John I. Viele, Alexander Walsh, N. M. Masters, and E. F. Willey, were appointed that committee.

The committee to nominate officers, having retired a short time, reported—

Edmund Charles Genet, President;
Moses Warren, 1st,
Martin Springer, 2d,
Smith Germond, 3d, and
Bethel Mather, 4th Vice-Presidents;
Dav. C. Norton, Recording Secretary;
Philip Viele, Corresponding Secretary;
Alexander Walsh, Treasurer.

Henry Vandenburgh, H. D. Groove, and John I. Viele, together with the officers of the society, were appointed the Executive Committee.

A committee of two persons from each town was also appointed to obtain members to the society.

On motion,

Resolved, That N. M. Masters, H. I. Genet, George D. Denison, and C. Lansing, jun., be delegates from this society, to attend the State Agricultural Society on the 12th of February next

The committee to draft a constitution, having retired some time, returned and reported one in form, which, after some amendments, was adopted, as follows.

Constitution of the Rensselaer County Agricultural Society.

The *style* of this Society shall be the Rensselaer County Agricultural Society.

Its objects shall be to improve the condition of agriculture, horticulture, and the household arts.

Section 1. The Society shall be composed of all such residents of the county of Rensselaer as shall subscribe to this constitution, and contribute to its funds one dollar annually; and of such other persons as the Society shall elect honorary members. The payment, at one time, of ten dollars, or more, to the Society, shall constitute a member for life, exempt from any annual contribution.

Section 2. The officers of the Society shall consist of a president, four vice-presidents, a recording secretary, a corresponding secretary, a treasurer, and an executive committee, all to be chosen, by ballot at each annual meeting of the Society; a plurality of votes to constitute a choice.

Section 3. There shall be four standing committees elected annually, each to consist of four members, viz.:

1st. On agriculture;
2d. On domestic animals;
3d. On horticulture;
4th. On household arts.

Section 4. The officers of the Society, and a committee of three, shall constitute an executive committee and board of managers for the general administration of the affairs of this Society, and shall be competent to enact such bye-laws as may be deemed expedient and necessary; three of whom shall constitute a quorum for the transaction of business. They shall have power to convene special meetings of the Society; to appoint committees to effect its proper objects; to take charge of and distribute plants, seeds, books, &c. which may be transmitted to the Society; to collect, arrange, and publish, addresses and other communications to the Society, in such time and form as they shall deem best calculated to promote the objects of the Society.

Section 5. The president, or, in his absence, the senior vice-president present, shall preside at all meetings, exhibitions, or fairs, held by the Society.

Section 6. The corresponding secretary shall correspond with the State societies, and with individuals, in furtherance of the objects of the Society.

Section 7. The recording secretary shall keep the minutes of the Society, and they shall at all times be open to the inspection of any of its members.

Section 8. The treasurer shall keep the funds of the Society, and disburse them on the order of the president, or a vice-president, countersigned by the recording secretary; and shall make a report of all receipts and expenditures to the Society at each of its annual meetings.

Section 9. The election of officers shall be on the first Wednesday in October, when a fair, for the exhibition and sale of domestic animals, and of articles, the produce of the farm, garden, and workshop, shall be established; at which time all premiums will be awarded, and the pecuniary concerns of the Society be audited, and published with the general proceedings of the Society.

Section 10. No member but such as has contributed one dollar to the funds of the Society, within the year of his or her application, can be admitted as a competitor for premiums. In all other respects, every member shall enjoy equal privileges.

Section 11. The principle adopted by this Society in determining questions of relative merit, among competitors for premiums, shall be, that the person producing the largest yield, of the best quality, at the least expense, is most deserving.

Section 12. In rendering certificates of objects for premiums, applicants shall be put upon their veracity, and, in addition to their own written statements, shall produce satisfactory evidence.

Section 13. If at any time it appears to the satisfaction of the board of managers that any unfairness has been practised in representing objects for the bounty of the Society, it shall be their duty to report the same at the next annual meeting; and a majority of the members present shall, at their discretion, suspend or expel such member from the Society.

Section 14. This constitution may be amended by a vote of two thirds of the members attending any annual meeting.

On motion,

Resolved, That E. F. Willey, Philip Viele, and H. I. Genet, be a committee to prepare an address to the farmers of this county.

In compliance with which the following address was prepared and published in several newspapers in the county.

Address of the Committee appointed by the Agricultural Society of the County of Rensselaer, to the Farmers in said County.

GENTLEMEN,—This address is to you! We intreat you to read it! You believe the common and generally received history of the origin and progress of the population of the world. You then believe that the eight persons alive after the flood, have, in a little more than four thousand years, produced eight hundred millions! At the same ratio of increase, in a few years to come, every rood of land must support its man, and every acre its family, or they must perish for want! You know, if you are acquainted with the history of man, that within the last four hundred years, the life of man has been increased one half, and the ratio of increase of the population of civilized countries has been doubled. You know, or may know, that the population of any country will be in proportion to the means of comfortable subsistence in it. You know, on a moment's reflection, that the means of subsistence in any country depends, almost entirely, on the state of the agriculture of that country; and that he who would improve the means of comfortable living in any country, will find that he must endeavor to improve the agricultural and mechanical arts of that country, and especially the former.

Is it, then, gentlemen, of any importance to increase the population of the earth? Is it of any importance to add to the number of happy immortal intelligences in your own district of country? Then lend your aid to improve the agriculture of your own county.

You know that the strength and riches of a country are in proportion to the excellence of its agriculture. Where a country has wise, skillful, and industrious farmers, it is rich, powerful and respectable; and where the contrary is found, it

is a place that no man desires to see or cares for. Are riches desirable? Are power and influence desirable? Is it desirable that the region in which you live should present that to the eye of a stranger which is pleasant, and that a high price should be set upon your farms? Then improve the agricultural state of your farm, and as much as possible the farming interest in your neighborhood. Is it desirable that your neighborhood and your farm should be the delight of your own eyes, and that your home should be pleasant? This also, in a great measure, depends on the state of your agricultural improvements.

Is it desirable to have things convenient around you—to have your oxen strong for labor, your cows and sheep sound and productive, and your horses handsome and swift? Is it desirable to enjoy more of the comforts of life in your dwellings, and to have a few dollars in your pockets? Then improve the agriculture of your own farm, and use your influence that your neighbor improve that of his farm.

It may be done with little or no additional toil for man or beast. Your country may be made to exhibit an entirely new aspect in all its departments and interests, with comparatively no sacrifice on your part. In neatness, convenience, and beauty, it may infinitely exceed what now appears to yourselves, and must appear to every stranger passing through your precincts! In the number and value of your flocks and herds, in the produce of your fields, and in the cash avails of your toil, all may be doubled in six years by individual and united effort. Do you believe it? How much less than six years did it take for Stimpson, of Galway, in Saratoga county, with means not superior to most of you, to double the value of his farm, and the yearly productions of it? And all was done with no greater effort than any of you can easily make, and with no better means of information than are within your reach. And how short was the term in which W. Taylor, of Charleton, in the same county, was employed in rendering the value and productions of his worn out lands double! What has been done may be done. You will see these things have been done in a thousand instances. Several are mentioned in the Cultivator, a paper just commenced in Albany, at a price so low that you may all read it, and at value to you, greater than its weight in gold. You yourselves know, that it costs not much more labor to raise 200 bushels of corn on three acres, or even two, than to raise 100 bushels on four acres; and every one must know that it is no more work to shear two dollars worth of wool from one sheep, than to shear one dollar's worth from two sheep. Then, gentlemen, look at the keeping.

Wilber Sherman, a farmer in this country, known to many of you, sells his cheese altogether in market for ten cents, while others sell theirs for five or six cents per pound. Does it cost more to make good cheese than poor? The last fall one of your committee, in company with a merchant, called on Mr. H. Delavan, a farmer in Ballston. The merchant desired to buy his butter. You can have it, said Mr. D., for 25 cents a pound; I can sell all the butter I can make for that price. And you who are now reading this, was perhaps trying to get 15 cents for yours. Soon after your committee saw sold, at the meeting of the Agricultural Society in Albany, a large quantity of butter at from 28 to 30 cents per pound! Does it take more milk to make good butter than poor? Are the farmers in this county indifferent whether they have cash or not?

A farmer in this neighborhood was about to sow rye on a large field. A friendly neighbor, who happened to see him, said to him, Sir, you had best sow wheat, and offered reasons, the result of experience. More than double the value in the produce of this field was effected by the suggestion of friendly advice and superior knowledge.

These facts, among a thousand others, are stubborn things. They prove the position we assumed, that your conveniences, influence, and cash, may be doubled in a short time. You still ask, how can this be done? We tell you: unite with our agricultural society; meet with your companions in toil, who have had experience, and who have grown gray in the study of the best means to make the earth yield her treasures to the support of man. Meet with the farmers of your county, and farmers from other counties will delight to meet with you. Your experience will greatly aid them, when you tell them how much your wheat was increased by sowing on a part of your field good house ashes, about the time it was coming out of the ground, and how much your corn on which you put leached ashes, and how much all your crops by the seasonable use of plaster; and you will be greatly edified by hearing them tell in what manner they fed and fatted their beef and pork, and how they managed their sheep, to raise 68 lambs of the best wool from a flock of one hundred, and how they obtained a herd of cattle, the best for milk, or labor, or market. Such meetings will teach, and such suggestions "*tell*," of the produce of your farms, and the cash in your pockets.

This is not all: such meetings of the agricultural society will not, *cannot* fail, to inspire a noble ambition and emulation in the minds of many, whose farms are now neglected, and give pain to the beholder, "whose stone walls are fallen down, and over the face of them nettles or thistles grow in undisturbed luxuriance." The Agricultural Society of Jefferson County has added more to the wealth and strength of that county than the mines of Golconda have to Portugal; and an ancient agricultural society in Pennsylvania has done more to increase the riches of that State than the mines of Mexico and Peru have done to enrich Spain. And your agricultural society will do more to add to your comfort and riches, if you attend it, and endeavor to profit by it, than the gold mines of the Carolinas will do to enrich them and add to their happiness.

It was a simple suggestion to Landgrave Smith that introduced the cultivation of rice into the Carolinas, which has done more for them than their gold mines can do. It was a simple effort that introduced potatoes into Ireland, which has doubled the population and wealth of that ancient kingdom. And how simple the suggestion which led to the planting of cotton in the southern States, which now gives employment and cash to millions!

It is impossible that those who have made improvements in agricultural knowledge can impart that information which is of immense value to the community, without meetings for the purpose of receiving it. The farmers in general possess one noble and distinguishing trait: it is a readiness to impart all the valuable information which they have on the subject of farming. They have no desire to keep secret those measures by which the condition of their neighbors may be improved. When, therefore, a vegetable of a superior kind is possessed, the farmer brings it to the meeting of the society: all that see it are desirous to avail themselves of the advantages of such a superior growth. You will be delighted to see with what readiness and pleasure the farmer will tell where the seed may be found, the land on which it must be planted or sown, the time when it must be committed to the earth, the manner in which it must be dressed during its growth, and the time in which it must be harvested.

In the meetings of our agricultural society, information will thus be communicated that cannot be committed to paper, for the farmer will see and know, hear and be instructed. Farmers, who now address you, want the suggestions of your experience and observation to assist us in our toils, and we are as willing to impart as to receive the suggestions of wisdom and the results of experience. We trust that the farmers of the county of Rensselaer are not wanting in the noble and distinguished trait of their profession mentioned above; that they will as individuals be most ready to meet with their companions in toil, and impart all the discoveries they have made; and that we shall soon see, that our crops, our herds, our flocks, our comforts, and our cash, are greatly increased!

We cannot close this address without expressing our gratitude to a few individuals who are engaged in other professions and employments, who have generously come forward to aid us with their scientific knowledge and cash in the toils of the field. A practical farmer in a late address says, "Agriculture is already in debt to science. Ignorance and prejudice may deny the obligation, but all the great improvements which have ever been made in agriculture have been effected by the inquiries and experiments of men of enlightened minds, of wealth and public spirit."

Yes, gentlemen, we will ever retain a grateful sense of our obligations to such

men in this country, whose hearts overflow with desires to do good to us, and whose knowledge and wealth give them the means to accomplish what they desire, if we are in a situation to receive it. We feel grateful to a few such, who when solicited have accepted offices in our society, while all the most important ones are left to be filled by farmers, who are alone to be judges of merit in farming, and whose hands are to distribute the rewards of superior industry and skill.

ELIJAH F. WILLEY,
PHILIP VIELE,
HENRY S. GENET,
Committee.

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At a special meeting of the Executive Committee, held on the 3d July, at the Lansingburgh Hotel,

Resolved, That the annual meeting of the Society for the election of officers for the ensuing year be held at the Court-house at the city of Troy, on the 7th of October next, when an address will be delivered, on the improvements of which agriculture is susceptible. Also,

Resolved, That, taking into consideration the infant state of the Society, the limited number of its members, and the deficiency of its funds, the committee has come to the conclusion that it would be inexpedient to attempt a general exhibition and fair the ensuing fall; but they confidently hope, that those who wish to encourage the institution will renew and continue their exertions to increase its funds, and insure its perpetuity.

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At the annual meeting of the Society, held at the Court-house, in the city of Troy, on the 7th of October, the subjoined address was read to the Society by Mr. S. Blydenburgh.

After the address, a committee was appointed, consisting of Mr. G. Canning, Mr. John I. Viele, and Mr. H. D. Groove, to present the thanks of the Society to Mr. Blydenburgh for his excellent address, and to request a copy for publication.

On motion, the following gentlemen were then elected honorary members of the Society:

Rev. H. Colman, of Massachusetts; Hon. Jesse Buel, of Albany; Mr. S. Blydenburgh, of Lansingburgh; and H. Perrine, M. D., U. S. Consul at Campeche, corresponding members.

On motion of J. I. Viele, the Society then proceeded to ballot for officers for the ensuing year, and the following gentlemen were elected:

Bethel Mather, President;
Daniel Rogers, 1st,
Martin Springer, 2d,
G. Corning, 3d,
H. I. Genet, 4th Vice-Presidents;
Philip Viele, Corresponding Secretary;
David C. Norton, Recording Secretary;
Alexander Walsh, Treasurer.

H. D. Groove, J. I. Viele, and H. Vandenburgh, Executive Committee.

The Society then appointed the following gentlemen a committee to solicit members, viz.:

S. T. M'Coun, Thomas White, Henry Vaile, G. Corning, Joseph Russell, A. Walsh, J. Dougry, H. Hicock, A. Knickerbacker, Amos Briggs, W. R. Tillinghast, P. B. Abbot, J. B. Lattridge, C. Lansing, Jr., A. Worthington, T. Reynolds, P. Marsh, Z. Hewitt, J. W. Thomas, H. Hall, D. J. M'Chesney, L. Eddy, D. Simmonds, G. T. Denison, N. Bishop, C. Griswold, S. Griffith, Col. Knowlson, R. Spencer, A. O. Spencer, O. Goodrich, H. Vandenburgh.

In reply to the application, by the before named committee, to Mr. Blydenburgh, for a copy of his address, he returned the following, together with said copy.

GENTLEMEN,—In consenting to prepare an address for your meeting, I could not have been prompted by any prospect of promoting my own interest, and I had a well grounded diffidence of my own abilities to overcome. But the unconquerable attachment I feel for every thing connected with the subject of agriculture, induced me to comply, though not without fears of being unable to give satisfaction. But if I have been so fortunate as to meet your approbation, and if, in your better judgment, the crude remarks I have embodied in the address can chance to be of any use to the public, they are at your service, especially as I have no ambition to appear as an author—and if I had, I presume what I have written will not be thought worthy of criticism. S. BLYDENBURGH.

Address of Mr. S. Blydenburgh, read at the annual meeting of the Rensselaer County Agricultural Society, October 7, 1834.

Before entering upon the subject before us, it may not be amiss to take a slight review of the circumstances in which we are placed at the time of our meeting.

A being, possessed only of a theoretic knowledge of the human character, would be led by every principle of justice and common sense, to suppose that the highest honors, the greatest wealth, and the deepest veneration of his fellow-creatures, were due to him whose talents and labors produced the greatest share of the necessities and comforts of life. But we find the reverse of this to be the case. We find, with very few exceptions throughout the world, from the earliest dawnings of history to the present time, the applause of mankind, even to idolatrous worship, bestowed on him who has destroyed the greatest number of human beings; and even princely rewards and immortal fame to him who was most successful in inventing the means to do it. We find almost throughout the world, from the earliest records of time to this day, the right of soil, and all the profits arising from the earth's cultivation, monopolised by a few haughty and overbearing idlers, who look down with insolent disdain on him whose labors produce the bread they eat. They consider the man, whatever may be his talents or his genius, whose honest toils produce the necessaries and luxuries which they enjoy in wasteful profusion, as a being altogether unworthy of respectful notice; and who holds the privilege to live and toil, on mere sufferance, through their clemency.

But, thank Heaven! and the invincible spirit of our fathers! we inherit a land where no such abhorrent state of things exist; but where every one is born to inherit and to feel the dignity of human nature. Here, the honest farmer, as he wipes the sweat from his sunburnt brow, instead of cringing and humbling before the insolent lord of the manor, fears no intermediate being between himself and the God who made him. The fruits of his labor are all his own—he has no dread of the rapacity of an unfeeling tax-gatherer—no privileged clergy to demand the tenth of all his hard earnings. If he labors to fertilize his grounds, to beautify his dwelling, or to enrich and embellish it with fruits and flowers of every kind, he does it for the benefit of himself and his posterity.

Is there an agriculturist in America, who, under these happy circumstances, can want ambition to urge him forward in the march of improvement—whose heart will not feel excited with noble ambition not to be behind his neighbors?

I should hope there is not, for it is on this ambition and this emulation that the security of our glorious privileges depends.

And here, permit me to apologize for my boldness in presuming to address myself, on this important subject, to an audience, every one of whom may, perhaps, understand it better than I do. But the fountains of useful knowledge have never been exhausted. No one is so penetrating as to have learned every thing. It is therefore possible that *I* may advance some idea which may not have occurred to the mind of every one here present, and which it may be useful to know. Trusting, therefore, to your indulgence, rather than to my own weak and uncultivated talents, I venture to proceed.

The employments which give subsistence to mankind in civilized life, are of three classes—*agriculture*, manufactures, and commerce. These are mutually useful and necessary to each other, in order to produce the greatest good in society. But it would be insulting the good sense of this audience to attempt to prove what you all know—that agriculture is the first in point of rank; and that, though the others are entitled to respect and protection, yet, that agriculture is the prime source of national wealth and prosperity, and the basis on which the others are founded. Wherever it flourishes, mankind are furnished with the necessaries and comforts of life, and are comparatively happy—where it languishes, or is wholly neglected, they are miserable and wretched. Look, for instance, at Potosi, the greatest manufactory on earth of gold and silver coin; where, it is computed, that for centuries past, ten thousand dol-

lars have been manufactured daily; but agriculture is neglected, and the place presents an appalling spectacle of wretchedness and depravity. Let commerce be the sole business, and we will find nearly the same result.

We stand, then, on this ground, that agriculture is the most noble human employment, and the United States the only place where it is duly encouraged, and its merits duly appreciated. It follows, of course, that to be an agriculturist, is, in point of usefulness, (the only just criterion,) the most exalted rank in human life; and that to be so in the United States, or, as we usually express it, to be an American farmer, is to hold the highest station in that rank. Who, then, can fail to feel his heart expand with the glow of satisfaction on being addressed by that proud title?

But there is no situation so happy but that the person who enjoys it would generally wish to see it improved. And this brings us to the great and important question—is, or is not, the business of agriculture, especially of agriculture in America, susceptible of improvement?

In attempting to answer this question, I shall appeal either to facts susceptible of incontestible proof, or to such theories as are demonstrated beyond the power of controversy. "Facts are stubborn things"—a single fact in point goes further than volumes of the finest theoretic reasoning. If my neighbor can raise twice the quantity of any vegetable upon an acre which I can raise upon a similar and adjoining one—or if, in the same time, and with the same expense, which I require to raise an animal of a given value, he can raise one of twice the value—no farther proof can be wanted to show that my system of management needs improvement. If, in another country, in similar climate and temperature, and whose primitive soil is not superior to our own, better crops and better animals are produced, the conclusion is irresistible that our management is in fault, and needs improvement. To show that such improvements are practicable, ten thousand facts stare us in the face.

Whoever is acquainted with the agriculture of this country, and has travelled in Europe, needs no farther proof. In England, where most farms are rented by the occupier, the rent, with the taxes paid to government and the clergy, will amount to more than an average crop from the same number of acres in the United States would sell for. But we need not go to Europe. There is scarcely a vegetable among the common productions of this country, but some enterprizing farmer among us has proved, by experiment, that the common yield is not one-fourth part of what may be produced by the same labor upon the same ground.

But so strong are the prejudices of education, especially when confirmed by habit, and still more so when that habit is strengthened by custom all around us, that not only in this country, but in every other, and as well among all other classes as agriculturists, in spite of the most brilliant examples set by a few enterprizing individuals, to entice them on the road to improvement, mankind will still prefer to continue, age after age, in the footsteps of their fathers. There are even some who are professed enemies to every improvement, and who not only ridicule, but utterly condemn as a dangerous innovation, the slightest deviation from that precise track which has been trodden "*since time whereof the memory of man runneth not to the contrary*"—as it is beautifully described by Cowper:

> "Such dupes are men to custom, and so prone
> To reverence what is ancient and can plead
> A course of long observance for its use,
> That even *slavery*, though worst of ills,
> Because transmitted down from sire to son,
> Is kept and guarded as a sacred thing."

To such people, to exhibit examples and state facts are time thrown away.

But the spirit of improvement, though subject to lethargy, and prone to long protracted sleep, will not sleep forever; she also has her waking fits; and the human mind, however confined and enslaved by prejudices or by oppression, will at times avail itself of its own strength. At such a waking fit Greece rose to a degree of splendor which time can never obliterate, and in such another the United States are now towering to the yet unknown summit of human glory. That blessed spirit is now transcendently awake, and her influence is felt throughout, and even beyond the limits of the Christian world. The march is fairly begun; and I think I shall not be charged with undue national vanity, if I say the United States are marching in the front rank. Within a century immediately preceding the present, greater improvements have been made in the useful arts than were ever made in three or perhaps five centuries at any known period before. It is true that agriculture has not hitherto taken the lead in these advances. The more subservient mechanic arts have gone forward, as a corps of faithful pioneers, to remove obstructions and prepare facilities, leaving agriculture to move with slow, but becoming dignity, as the main body in the centre, while commerce, in flank and rear, closes the procession. To pursue this metaphor a moment farther, it is natural in taking up a line of march, to ask where is the point of destination and at what times we shall arrive at certain stages on the way? Permit me to answer, if we pursue the course which lies open and straight before us, (and there is no obstacle in the way if we do not place it there ourselves,) the only point at which we can rest satisfied to discontinue our perseverance in improvement will be the greatest vegetable and animal productions, and in the greatest variety which nature will permit. The time will depend on our industry and perseverance; it may arrive in twenty-five or fifty years, it may be a hundred, and it may possibly be never. But should any one here present be alive, and remember the doings of this meeting fifty years hence, I wish that person to remember that I here assert that, at that time, unless prevented by some unforeseen national calamity, the agricultural productions of this country will be, from the same labor, from twice to four times what they are at present, and that they may as easily be so in twenty-five years as in fifty; and there is not an individual farmer, who, if he avails himself of the means in his power, may not effect the same increase of profits in ten years. I will state the reasonings which have led me to this conclusion, and some of the facts on which these reasons are founded.

The primitive earths of which soil is compounded are so few in number and so universally distributed, that whatever qualities may be found in one acre, another acre may be mixed and tempered so nearly to resemble it, that the difference cannot be told. It follows, of course, that whatever crop one acre has produced, if the soil of another acre is made similar, it will produce the same as the first, with the same treatment in a similar season. Let this position be fairly understood by any farmer, and, as it ought to be, adopted as an axiom; and let the fact be proved to his satisfaction, that an acre of his ground, properly managed, will yield a hundred bushels of Indian corn, with as little labor as it now yields twenty-five; and it would be an insult to common sense to doubt his readiness to adopt the plan and to profit by it. It is true, as I have already stated, that early prejudices and the want of more general diffusion of knowledge cause accounts of remarkable results in agriculture to be met with disbelief; but that incredulity, like mist which obscures the morning sun, will soon be overpowered by the light of better information, and those who have doubted the facts be the foremost in profiting by them.

I will now lay before you a few uncommon results in agriculture, which to some here present may doubtless seem incredible, but every one of which is susceptible of such proof as to put all doubt at defiance; and which, I hope and trust, will soon become common to you all in your own practice.

I will begin with Indian corn, as probably it is the staple article of our country.

John Stevens, of Hoboken, has produced on one acre 118 bushels and 2 quarts.

Earl Stimson, of Saratoga, 896 bushels on 8 acres, average 112 bushels; and 900 bushels on 10 acres, average equal to 90 bushels.

In Pennsylvania, Joseph Evans 136 bushels, John Wolf 127½ bushels, Samuel Anderson 123 bushels and 12 quarts, Isaac Vanvookens 120 bushels, Isaac Buckingham 118 bushels and 1 quart, James Clakey 113 bushels, Jesse Cooper 108 bushels, and Degrasse Jennings 120 bushels. All these last applied for premiums at the same time, in one and the same county, and each was the average product of five acres. I could go on with a long catalogue of instances, all perfectly authenticated, of more than 100 bushels to an acre, but will recite but one more. In 1831, Mr. Charles Bugbee, of Palmer, Massachusetts, where the soil is decidedly acknowledged to be inferior to

the soil of New-York, obtained 540 bushels from 5 acres.

But the astonishing results of good farming are not confined alone to indian corn. The richest soil in the world, unless replenished from year to year, will become so exhausted by successive crops of wheat, that it will produce no more; while the poorest land, by skilful management, may, in about the same length of time, be made to yield an abundant crop. Most of the land in the eastern states produced wheat till it became worn out by bad husbandry; while in England, from land which has been under steady cultivation for more than a thousand years, 40 bushels of wheat are only considered a fair crop.

It was stated last November, in the Poughkeepsie Journal, that E. Holbrook, Esq., had raised 780 bushels of pink-eyed potatoes from an acre, and that with little labor, mostly performed by the plough; and that he had raised from another acre, 1,089 bushels of ruta baga turnips, weighing 42 pounds to the bushel, equal to 33 tons, 3 qrs. and 18 pounds; and that the measure was made by disinterested persons, who were willing to testify to the production. And the same, or similar improvements, in almost every agricultural production, whether vegetable or animal, are the constant and natural results of good management. Nor is the advantage confined alone to increase of quantity: the quality of the articles, and, consequently, the price in market, is frequently enhanced in nearly the same ratio. The produce of a well-conducted dairy is sought for with avidity at an advanced price, even when ordinary articles of the kind will scarcely sell at all. In the article of cider, when that which is common will not bring a dollar a barrel, that which is first-rate will generally command cash at five dollars.

And even here, with increase of quantity, quality, and price, the farmer of talents and enterprize does not stop. He reflects that to all these advantages he can add variety to his stock of goods, by introducing such foreign articles as are adapted to the climate where he is situated. He reflects that the vast sums of money which leave the country annually for wine and silk—an expense probably in which he himself is not exempt from bearing a share—might not only be saved to the country, but that he could thereby convert a tax into an income.

We may view these things as problematical, and even visionary, but we can find them confirmed by successful practice within a day's ride in any direction.

Will any one here believe that the next generation will be found plodding on in the same path which their grandfathers trod—scratching over an acre of sterile ground to get fifteen or twenty bushels of corn; and throwing their manure into the river, or moving their barn in consequence of its accumulation. The very admission of its possibility would be a libel on common sense.

But this change cannot be effected at once. It must take place by gradual advances, as the day follows the night—at first faintly and doubtfully gleaming, while the stars shine with brilliancy, but climbing on by imperceptible degrees, soon changes the gloom of night to the blaze of day.

But the clouds of superstition and prejudice, which have rendered our night of ignorance still more gloomy, are fast breaking away, and bright constellations are ushering in the perfect day of improvement. A Buel, a Colman, and many others,* may be considered, not only as stars adorning our yet benighted hemisphere, but as harbingers of the glorious morning of science which is soon to follow.

Science and art, which were designed by Nature as twin sisters, for the mutual benefit and support of each other, have been from time immemorial alienated and estranged by the artifices of designing men. But, thank Heaven! they are becoming happily reconciled. Science, tired of spinning hypothetical cobwebs in secret, has at length found out that she is indebted to her long despised sister, not only for the common comforts of life, but even for the instruments with which she makes her discoveries; and *Art*, finding herself no longer insulted, instead of groping in darkness, as heretofore, is now making rapid advances in the perfection of her labors, as she pursues them by the light of science. Every branch of the useful arts is now assuming an improved character, as it begins to be conducted on scientific principles; but in no branch whatever is the knowledge of those principles of more importance than in agriculture.

The same overbearing spirit, which has heretofore monopolized all the honors, all the respectability, and most of the wealth, has endeavored, and still endeavors, to claim all the learning. We have two or three professions, which, however necessary, (and I have no disposition to question either their usefulness or their respectability,) cannot produce a single article even for their own subsistence, but which are with great emphasis styled the *learned* professions; while the farmer who feeds them, and who furnishes the materials to clothe them, is in grateful return greeted by the sweet-sounding appellation of clodhopper. There can be no shadow of objection to giving learning to the man who labors for our spiritual good—to the lawyer, who settles our temporal disputes—or to the physician, who heals our maladies. But why, in the name of common sense, is it not equally necessary for the farmer? I would not dispute with either of these learned professions for the monopoly of the dead languages, but for the ever-living natural sciences—for mathematics, mechanics, chemistry, botany, and zoology, and their subordinate branches. I contend that where the clergyman, or the lawyer, has one professional occasion for their use, the farmer has fifty. By botany and chemistry, he learns the physiology of his plants, the nourishment and treatment they require; and, by analyzing his soil, he discovers what is necessary to maintain and increase its fertility. Zoology and natural history teach him the characters and constitution of his animals; and mechanics, the structure and use of his implements. In short, his whole business of life is a series of illustrations of the principles of science, and his whole establishment is a scientific laboratory.

May we not confidently hope that the worthy gentlemen of these learned professions will at some day be willing to admit the scientific farmer to an equal rank in the scale of being with themselves? But the number thus favored, however, must, for some time to come, remain very limited; for though we have colleges of distinguished reputation dispersed throughout the country, yet the course of education they pursue is of too abstract a nature to be of any essential service to the interest of agriculture. There can be no doubt that those who have no faith in book farming will smile at the idea of a college-learnt farmer. But how many things have been smiled at as ridiculous at one period, and at a subsequent period hailed and applauded as wonderful improvements? We have theological seminaries, and medical seminaries, and law seminaries, and military seminaries, and each endowed with splendid and costly libraries, and all the paraphernalia of scientific illustration and experiment, and furnished with able teachers, liberally supported. But poor agriculture, whose hand sows the seed, and whose arm gathers the harvest and the vintage, on which all our earthly comforts and even our very existence depends, she can have no seminary in which to teach her sons the most valuable of all arts. No matter—they are nothing but clod-hoppers; if they can learn their letters and read the bible, what more can they want to know? Even our wise legislatures can grant supplies for literary and other public institutions with a liberality which does them great credit, but touch the string of agriculture, and it refuses to vibrate; the whole instrument seems paralized and makes no music.

But let me entreat the friends of agricultural improvement still to persevere, notwithstanding all these discouraging circumstances. Let the disciples of the old school ridicule *book* farming and laugh at the idea of an agricultural college, or of schools to teach the farmer how to hoe his corn. As I have already stated, the spirit of improvement is awake! Our State legislature already has the subject before it, and the agricultural society of the State will doubtless pursue it with persevering attention. It is true, we cannot have the credit of setting the example and leading the way. Such institutions are already established, and are producing most happy

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* The list of those whose talents are devoted to the improvement of agriculture in the United States is too numerous to be here inserted, if we possessed it; but there is one individual whose name it would be an unpardonable disregard of merit to omit. Doctor H. Perrine, United States Consul at Campeche, has devoted so much talent, time, and money, on the subject, that it reflects disgrace on his country that he has not been duly encouraged.

results in several parts of Europe; and young men are attending them even from this country. Let us then have the praise of setting the example in our own country, and let this State take the lead of all the others. Where is the man of so much apathy as not to be cheered with the anticipation of beholding such an institution: an extensive and handsome edifice, where our young men shall be taught, in theory and in practice, those immutable principles of nature which form the only infallible guide to all the substantial comforts of life? Where, by mingling the useful with the sweet, they will become inured to habits of industry: where science and art shall combine to inspire them with laudable emulation to excel each other! If we are charmed with viewing a garden, upon a small scale, the work perhaps of a single, but skilful individual, how infinitely more charming must be the view of three or four hundred acres, planned and laid out with all the accumulated skill of ages, aided by all the lights which science has thrown on the subject, with all the beauties of the vegetable world, and all that is useful of the animal! Could any earthly prospect be more delightful? I answer, yes; that of two hundred young men, vying with each other, in skill and industry, not only in improving and beautifying the establishment, but in improving their minds by study and their bodies by manly labor, infinitely more pleasing and more to their credit than the mountebank feats of a gymnasium; thus fitting themselves as brilliant lights to guide, instruct, and adorn the succeeding generation.

This view of the subject, or rather the subject itself, far surpassing any picture I can draw of it, will soon become reality, if those interested in its progress do their duty; and that they will do their duty, the talent and integrity already engaged are sufficient guarantee. Let this State set the example, and all the other States will imitate it. And what will hinder the same from taking place in every county? Should one county lead the way, there can be little doubt but all the others will follow. But the county institutions will of course be small, compared with that of the State. One hundred acres of good land, with other suitable investments, might be sufficient; and what mighty thing would the cost of a hundred acres of land and a little expense in buildings and apparatus be for this county? There is abundant reason to believe that such an institution in each county would be an immediate source of pecuniary profit, independently of all its other advantages. But the State institution must necessarily lead the way. That institution, then, as the parent or head, would furnish teachers for all the others, and it would also furnish seeds, plants, and animals, of every description; and as it would be foremost in all untrodden ground, it would protect the county institutions from all loss in new and untried experiments, and afford a pattern for them to follow in all their operations. The State could afford expenses in books and apparatus, as well as in the introduction and acclimation of rare and valuable exotic plants; and also in procuring valuable and extraordinary animals, which would be altogether beyond the reasonable means of a county, much more so of an individual; and yet these valuable acquisitions would be no less so, either to the county or the individual, because they cost comparatively nothing. There are probably more than a hundred thousand respectable farmers in this State. Many of these have been at very considerable expense to introduce some valuable breed of animals, or even the seed of some extraordinary vegetable. Now, suppose the expense so incurred should, in some case, be a hundred dollars,—and it has been in many cases much more; this would be a heavy tax for an individual; but divide this tax among the hundred thousand farmers, and it amounts to one mill a-piece. And suppose this introduction were effected by the United States, the expense to individuals would be still less; the liability to imposition would be also less; and the chance of its being distributed over the States, and consequently the public thereby benefitted, still greater.

Let this parent, or State agricultural school, be attended as it would be, and as I venture to say it will shortly be, by pupils from each of the counties, each of whom will be an interested representative of his own county; and let each county have, as there is reason to hope it will have, a school after the same model, but upon a smaller scale; and when this system shall even begin to be in full operation, how abundant will be its benefits to every farmer in the State, as well to those who have not, as to those who have been its pupils. If any new and valuable production is introduced, as fast as the course of nature will suffer it to multiply, it will, of course, be distributed for the benefit of the whole. Are new agricultural implements invented, here their comparative merits will be tested; and if, upon fair experiment, found not good, they will be condemned, without suffering individuals to be imposed upon. Here, also, every farmer in the county may, without much expense, go and view the operations and improvements himself, and not listen to stories which he has no faith in, or read books on the subject which he does not understand.

But I must quit, though reluctantly, this field of pleasing anticipation, but which, as I have already stated, I have no doubt, will soon be viewed a field of much more pleasing reality, and return from the long digression I have made, to the more immediate business of our infant institution. We cannot commence our school till the State shall set us the example; but we can cultivate our farms according to the best information we now possess, or can obtain; and we can go great lengths in improvement without waiting for better education.

By associating ourselves, as we propose to do, together—by the united talent, enterprise, and means of the county—by comparing our experience together, and mutually instructing each other—and by uniting all our efforts to obtain useful information from every quarter, and make every improvement in our power—we can, without doubt, make infinitely greater progress than we could all do collectively, each acting alone in his individual capacity.

Did I possess unlimited knowledge on the subject, and were I infinitely capable of giving instructions in agriculture, the present opportunity would scarcely admit of giving even a regular catalogue of its branches, much less a system of detailed instructions. You will indulge me, however, in a few words, merely to point out a few of those heads of the subject which I think most pressingly demand your attention, and also to offer a few brief remarks on the best course to be pursued in obtaining information.

There is an evil, which sits like an incubus upon the very vitals of our agricultural interest, and which, until it shall be in a good degree removed, will forever paralize all our efforts to improve it; and that evil is a kind of insatiable avarice to possess more land than we need, or can cultivate. This is so deeply fixed in our minds by early impression, that it will be hard to overcome it. Our ancestors came from countries where the man who possessed land in fee-simple was looked up to as a superior being. No wonder that when they came here, where every man could obtain it, every one was anxious to become the lord of a little manor. This spirit has descended from father to son—every man reckoning his wealth by his number of acres, not by what he produced. The inevitable consequence is what we see from one end of the United States to the other—our farms unfenced, and a miserable cultivation scattered over four hundred acres, which would produce more on one hundred. Our manure is spread over so much ground, and consequently so thin, that the rains wash it away, and it does little or no good; and all this for no benefit, unless to make our names look more respectable on the list of assessments. If a man wishes to buy land for speculation, he had better let it lie, than waste his time and money in attempting to cultivate more than he can manage to advantage.

Whenever a man enters upon the management of a farm, the first object to which he pays attention ought to be to see that every part is well, and thoroughly, and permanently fenced. Nothing is more preposterous than, because he thinks he cannot afford the time and expense to make good fences, to expose the avails of all his labor and seed to be destroyed, and at the same time teach, not only his own cattle, but those of his neighbors, to be unruly. If his object is to turn his time to profit, there is nothing enhances the value of a farm in the eye of a purchaser more than to see it well fenced, while decayed and ruinous fences often excite prejudice in his mind against the real intrinsic value of the land.

When the farm is duly fenced, the next object in course is, by all possible means, to render it productive; and this

object, though attainable by every man in some degree, still opens a field of study which may occupy the mind of the most intelligent farmer with profit his lifetime. It would surpass the limits of our present meeting to make even the slightest attempt to particularize. I will only remark, that plants require food as well as animals, and cannot, any more than they, thrive without it. A great part of this food or nourishment they draw from the earth, and if the earth is not replenished with the means of affording nourishment, it becomes, as the common phrase is, worn out, and the labor of cultivating it is lost.

But various plants require various kinds of nourishment. The land, therefore, requires various kinds of treatment to keep it in order. In some cases, it requires large quantities of manure to be actually applied, and that of different kinds, according to the nature of the land, and of the crop to be put on it. Sometimes it may not only be kept in order, but greatly improved, simply by a proper rotation of crops. It often happens that the treatment which would benefit one piece of land would injure, or at least be of no benefit, to another. Thus, that which would be highly beneficial to sand would be of no use on clay. Hence it is a common saying in England, among those who use marl as a manure,

"He who marles sand will soon buy land;
But he who marles clay throws all away."

Many people avoid manuring their land because they cannot afford it; and the same economy teaches some to starve their cattle, because they cannot afford to feed them. The latter practice commonly ends in death just as the cattle get learnt; and the former, if it does not end in the death of the farmer, will generally end in the transfer of his farm by the hands of a sheriff. To illustrate the difference by profit and loss, between manuring and not manuring, I will state a case founded on substantial facts, and I think the result will leave little doubt on the subject.

There can be no precise standard fixed as the average expense of raising an acre of Indian corn, but for the present purpose I will assume twelve dollars, which I think is rather a low estimate than otherwise. I have already stated, that Charles Bugbee, of Palmer, in Massachusetts, raised five hundred and forty bushels of corn from five acres. I knew his land in its original state, and I know twenty dollars per acre was its utmost value; and I also know it could not have been made to produce over twenty-five, or, at most, thirty bushels, whatever labor might have been bestowed on it. I will now present an estimate by Dr. and Cr., for five years, had it been cultivated in its former state, and another for the same time in its improved state, and see how the two accounts will compare, and what will be the footings by profit and loss.

In the first instance I will debit the account for the outsets, and credit the returns thus—

Dr.—5 acres of land at $20,	$100 00
5 years' interest at 6 per cent.	30 00
5 years' cultivation of 5 acres, at $12 per acre per annum, . .	300 00
Total,	$430 00
Cr.—The same land, . .	$100 00
5 crops of corn at 25 bushels per acre annually, 125 bushels each, at 50 cents, . . .	362 50
Total,	$462 50

Making, in five years, a net gain of $32 50.

We will now make the estimate on the land in its improved state.

Dr.—The ground and interest as before, . .	$130 00
125 loads of manure at $1,	125 00
5 loads per acre per year for 4 years afterward,	100 00
5 years' cultivation as before, . . .	300 00
Total,	$655 00
Cr.—5 crops of corn at 108 bushels per acre, 2700 bushels, at 50 cents,	1350 00
5 acres of land, now worth at least $60 per acre,	300 00
Total,	$1650 00

Leaving a balance on the profit side, of $995.

However extravagant this estimate may seem to those who have not duly considered the subject, it is no more than a fair view of the difference between manuring and not manuring.

As to the various modes of improving your soil, whether by actual manuring or rotation, or both united, and in what manner, you will find at least much information in the various periodicals devoted to the subject in our own State. Among these the New-York Farmer, and the Genesee Farmer, are especially entitled to notice; but the little Cultivator, edited by the President of the New-York Agricultural Society, contains more valuable information on the subject than was ever offered to the public at the same expense.

But even with the assistance of these publications, until the State and county schools shall be established, and in full effect, the most copious source of information will be the united efforts of the State and county societies. It is to social intercourse that we owe nearly all the improvements which distinguish civil society. Improvements which perhaps the most ingenious member of society would never have dreamed of in a solitary state, are presented in society almost every day; and these, multiplied into each other by constant interchange of ideas, are increasing, in proportion, the stock of useful knowledge.

It is true, our society, in its present incipient state, scarcely presents an epitome of what we have reason to hope it will soon appear. But what is never begun can never be accomplished. The astonishingly beneficial effects of agricultural societies present themselves around us in every direction. The money and time it will cost individually to make this society highly respectable are too trifling to be worthy of serious notice; while the benefits resulting from the united efforts of all the talent and enterprise in the county will be beyond the power of calculation. Every one, by bringing his individual stock of knowledge into the general mass, will be entitled to the benefit of the whole, for knowledge never lessens by being divided. Each one will feel his ambition increased by emulation, and his desire not to be behind his associates will constantly increase his efforts for his own benefit. In short, if we consider the trifle it will cost, and the immense benefits naturally resulting from it, it is hardly to be believed that any respectable farmer in the county will withhold his name from becoming a member of the Rensselaer Agricultural Society.

Waste of Manure.—"But as an example may perhaps bring this before you in a stronger point of view than in any other way I can put it, let me suppose that some of you should purchase a little tea at a grocer's; as long as you keep it dry and shut up from the weather, it will preserve its original strength, even for years; but when you put it into a teapot, and pour water on it three or four times, the strength is all gone, and your tea becomes, I may say, dead useless matter. It is just so with your manure. I see it often placed in such situations that the rain water from your house and offices, and the seepage from the higher grounds, all run through it; thus every shower floods it day after day, carrying off always some part of the strength, until at length it is left as dead and as useless as the leaves thrown out of the teapot.

"Surely no man in his senses will persist any longer in such gross mismanagement. If you were to observe a man quietly stand by and see his potatoes destroyed, which were to be the chief support of himself and his family, you would say he was either mad or a downright idiot; and if this would be your opinion of him, what can you say of yourselves when you stand by and daily look on at the destruction of that manure by which your potatoes are to be produced?"—[Blacker's Essay.]

Salting Butter.—The quantity of salt for butter that is not to be eaten for several months after salting, should not be less than half an ounce of salt, mixed with 2 drachms of sugar and two drachms of nitre, to sixteen ounces of butter. The sugar improves the taste, and the nitre gives the butter a better color, while both of them act with the salt in preserving the butter from rancidity. If the salt is not minutely mixed into the butter, that on which it rests will have a yellow or brownish color, while the rest will be of a white color, which, in dairy language, is termed "pyety butter," that brings an inferior price. But although the butter has to be kneaded among the water, and the salt well mixed into it, care must be taken not to bake or knead it too much, otherwise it will become tough and gluey.—[Quar. Journal.]

BOOK FARMING.—Those who are prejudiced against book farming, should duly consider Mr. Gaylord's definition of it in the Genesee Farmer.

A few cultivators of the earth agree to communicate to each other the results of their experience in farming: raising cattle, sheep and hogs—the best modes of preparing and using manure—the most profitable crops, and the best mode of raising them—the best breeds and the best modes of fattening animals—and, in short, all things of general interest relating to the occupation of a farmer. These results are committed to writing, go through the press, and become a book. He who chooses to follow the results of enlightened experience as there detailed, is guilty of book farming. A gentleman who has money, inclination and leisure, following nature as a guide, commences a series of agricultural experiments, which result in doubling the means of existence from a given quantity of land; or, in other words, makes two blades of grass, or two bushels of wheat, grow where but one grew before. Such a man is a benefactor to his country; but, if actuated by a noble regard for the general good, and anxious that all should partake with him in the benefit, he sends a history of his proceedings to a journal, that others may avoid his errors, it is denounced as a mere whim—as nothing but book farming. No matter how important or how valuable the published accounts may be, if they add one half to the productiveness of a farm, there are many, too many, who scout them as unworthy of notice. If, however, we were required to point out the men who had done the most to advance the agricultural interests of the state or country—who have introduced the most successful methods of raising crops, and improving the soil—we should be obliged to fix on these who are emphatically book farmers; men who were bred to other pursuits, but have relinquished them for the safe, honorable, and, in their case, eminently successful cultivation of the soil.

To all then, who aspire to the honorable title of an intelligent tiller of the soil, we say, take some standard agricultural work—to every present subscriber to the Farmer, we say, not only continue your subscription, and endeavor to promote its circulation among your neighbors, but become a contributor to its columns of the results of your farming experience—your success and your failures—preserve the numbers carefully, and see when each volume closes, they are well bound. Read carefully, compare thoroughly, reduce your knowledge to practice, and you will be singularly unfortunate indeed, if you do not find yourselves remunerated tenfold. WILLIS GAYLORD.

Olisco, December, 1834.

WHEAT AND SOIL OF WEST NEW-YORK.—We do not believe either theory, or the most improved practice, will bear out the writer in his *maxim*, at the conclusion of the following extract from the Genesee Farmer. From the experiments that have been made in various sections of our primitive country, and from our notions of scientific agriculture, we believe many farmers who now enjoy good water, will be enabled to raise as good wheat as grows in the Genesee country.

The territory of New-York, included between Lake Ontario on the north, Lake Erie on the west, the line which divides the waters flowing into the lake from those which flow to the Susquehannah and Mississippi, on the south, and the counties of Madison, Oneida and Oswego, on the east—a tract of country about 50 miles in width by 150 in length, and containing not far from 8000 square miles,—is unquestionably one of the finest farming countries in the world, and possesses within itself more sources of agricultural wealth than any portion of the United States. In the amount of quantity, and excellence of quality, of its wheat, it is confessedly without a rival; and owing to peculiar causes, unless there is the most gross mismanagement in the treatment of the soil, this superiority it must retain. Lime and gypsum, two of the substances most relied on for keeping land in good heart, or restoring that which has been impoverished by bad management, are found in almost every section of this district in inexhaustible quantities; and in these two minerals, aided by the other means within the reach of the husbandman, is found a resource, which, if used with ordinary skill, cannot fail to render West New-York for ages, perhaps for ever, deserving its present high reputation of being the granary of America. In this territory wheat is, and probably will be, the great staple; to its culture, then, the attention of our farmers generally is directed; and any thing which has a tendency to prepare the soil for this valuable crop, or prevent the exhaustion of those peculiar qualities, on which the excellence of the wheat grown is founded, will receive a paramount regard. That there is a great difference in the capability for making fine flour in wheat grown on the northern or southern slope of West New-York, is so well known, that no proof of the fact need be adduced. Experienced millers have assured us, that this difference is equal to at least ten per cent. The wheat kernel, to be good, must be plump, thin skinned, and exhibit, whenever cut or broken, a body white of itself, and which is converted into flour by the slightest process. Inferior wheat, on the contrary, will be hard, dark colored, and when cut or broken, appear solid, smooth, and tenacious; such wheat can never make the first quality of flour. It is only on lands where lime is abundant, or where what is termed the hardness of the water indicates its extensive prevalence in the soil, that the finest wheat is produced. It may be set down as a maxim in practical husbandry, that good water, and good wheat land, are incompatible with each other; or in other words, that countries of primitive formation are not by nature adapted to wheat.

CORN—IMPROVED HUSBANDRY.—In the National Intelligencer we find the following extract from the Journal of a Traveller for agricultural information. We would recommend every young farmer, in particular, to travel in good farming districts, and to keep a diary of all he sees and hears that is, or *may be*, of importance.

Nov. 1, 1834.—Visited Mr. John Semmes, of St. Mary's county, Maryland, who informs us that his great crop of corn averaged upwards of twenty-five barrels the acre. Respectable judges of the county were appointed to ascertain the quantity of corn; and, after having accurately surveyed one acre, the corn was gathered and measured. First, a barrel being shelled to ascertain the accuracy of the barrel, eighteen or twenty of the respectable gentlemen of the county and of the adjoining county were present, saw the land measured, saw the corn measured, and are ready at any time to testify the fact, that the average acre, measured in their presence, amounted to twenty-five barrels and some pecks per acre. This farm is situated on the Patuxent river, fifteen miles below the "Cool Springs," or Charlotte Hall, and adjoining the farm on which Cole's Tobacco Inspection is—and the third from the Queen Tree. The farm is uncommonly hilly.

Process.—He prepares his ground by clover, the ground laid off from five by two and a half to three feet. The corn then dropped, three grains in the check, followed by persons who drop on the corn, or even if they are in advance of the corn droppers, a handful of two-thirds slacked ashes, and one-third plaster, mixed before it is dropped. Should the corn not come up regularly, he drops one or two seeds more, as may be necessary. He gathers his seed corn from the field before gathering the crop, so as to have a choice of ears. He plants from the 1st to the 10th of April, and ploughs four inches deep.

EARLY CORN AND WHEAT.—The following article was communicated to the N. E. Farmer by the Hon. Samuel Lathrop. We wish it was more general among men of influence to show their respect for agriculture, by communicating to periodicals the results of their experience and observation.

Last year, H. Huxley & Co. 81 Barclay street, obtained this corn from Judge Buel. Mr. D. F. Ames, of New-Jersey, planted it after his neighbors had finished planting their white corn. Mr. A.'s ripened first. Mr. D. S. Mills, of Long Island, planted it so late that other varieties would not have come to perfection. He had a good, though not a full crop.

Dear Sir—The farmers living in the valley of Connecticut river have, within a short period, greatly extended the cultivation of wheat beyond that of former years; a considerable proportion, probably the greater part, is sown after corn. We have suffered great inconvenience, and sustained some loss, from the impracticability of getting off our corn in season to sow the ground. Grain sown very late is more liable to be winter killed, and more exposed to blast, than that which is sown in its proper time. It has repeatedly happened with me, and I have not been behind all my neighbors, that I have not been able to get through the wheat sowing till after the middle of October. This is quite too late to expect a good crop. The business ought to be completed in September, and if it could be done by the middle of that month, I think we should be more certain of success.

In the summer of 1833, I was conversing with Judge Buel, of Albany, on this subject, when he informed me, that for a number of years, he had cultivated a kind of corn which was about a fortnight earlier than the kind most commonly used, and that he thought it equally profitable for cultivation. In consequence of this information I procured my seed corn of him last spring, and planted no other this season. The crop has exceeded my expectations. I never had a better one from the same quantity of land, and it came to maturity some time earlier than other fields of corn in the vicinity. I think it will prove a valuable species to those who wish to sow their land with wheat. In ordinary seasons, it will have become sufficiently ripe for harvest by the middle of September. It is a species of the twelve-rowed corn, but the growth of stalk is very small, compared with the twelve-rowed corn which I have been accustomed to plant—not exceeding

one half the weight; of course, the exhaustion required to sustain an equal number of stalks is much less. This species of corn will bear planting much thicker than any other kind of field corn which I have ever cultivated. I this year planted the hills three feet apart in both directions, intending to have three stalks in each hill. But it may be planted three feet by two and a half, and then the ground will not be more shaded than it is with the corn generally raised here, when planted in squares of three and a half feet. The ears set low on the stalk, grow to a good size, and the grain is heavy. I think it is as valuable for use as any other kind of this grain; and from the fact that it will bear planting so thick, I believe that I can secure a larger product than from any other that I have ever tried. But the circumstance that gives it its chief excellence in my estimation, arises from the fact, that I can gather my corn in season for the sowing of wheat. In the most unfavorable season, the wheat may be sown in September, and in very favorable seasons, early in that month.

I am, very respectfully, yours, &c.

SAMUEL LATHROP.

West Springfield, Oct. 23, 1834.

GYPSUM.--Raspail has decided, as the result of a series of experiments, that "it is not the leaves of the leguminous plants that absorb the gypsum which is dusted over them, but the roots, when the dew or rain has washed it into the soil; and hence the advantage which has been found of applying this powder a little before the dew comes on." It was the practice of John Taylor, conspicuously known as the author of Arator, and one of the best practical farmers in Virginia, to sow his plaster for tillage crops before the last ploughing, that it might be buried in the soil, where the roots of plants required it. In applying it to grass lands, he recommended, if our memory serves us, that it be applied early, that the spring rains might convey it to the roots. We have, in the pamphlet of Judge Peters, upon the application of Gypsum, another corroboration of the correctness of M. Rapsail's conclusions. In many instances, there narrated, where the gypsum was sown at the commencement of a drought, or late in the season, it produced no apparent benefit that year. It would be useful if farmers would satisfy themselves upon this head, by sowing a part of a field early and a part late—a part before the last ploughing, and a part upon the growing crop. So far as our opinions have been formed from practice, they are in favor of sowing on grass in April, and for tilled crops before the last ploughing.

PUBLIC LANDS.—From one of the documents accompanying the Report of the Secretary of the Treasury, it appears that during the year ending 31st December, 1833, there were sold of the public lands, 3,856,227,056 acres, for $4,972,284 84; and that the amount received in cash was $4.559,221 99, in forfeited land stock $47,230 55, in military land scrip $365,832 30—making a total of $4,972,284 84, as above. The amount of incidental expenses was $153,268 33; and the amount paid into the Treasury, $3,967,681 55.

During the first three quarters of 1834, there were sold 2,372,931,035 acres, for $2,996,596 01, of which $2,821,291 78 were paid in cash, $19,065 27 in forfeited land stock, and $156,238 95 in military land scrip. Incidental expenses, $115,799 79. Paid into the Treasury during the same period, $3,076,475 50.

SEA WATER AS MANURE.—Several instances are recorded of the benefits of salt water. The potatoe crop has been very considerably increased by it. It should not be applied when the ground is dry, lest it kill young and tender plants, and injure others.

PITTS' HORSE POWER AND THRASHING MACHINE.—We were next summoned to examine Pitts' improved Horse Power and Thrasher. This is an improvement invented and patented by Messrs. J. A. and H. A. Pitts, of Winthrop, and your committee think that a very considerable improvement has been effected by them. The principle is on the plan of the Endless Chain—but the horse travels upon wood, and the logs are kept from sagging by a new and ingenious application of a system of rolls, called by the inventors "surface rolls." The improvements appear to be—1. A greater ease for the horse; 2. Less weight in the machine; 3. Less expense to the purchaser. It can be easily made, with slight additional expense, for two horses. It thrashes clean, and on the whole is a valuable implement for the farmer. We think the Messrs. Pitts richly entitled to a gratuity for introducing their improvement among us.

PULLEN'S METALLIC WASH-BOARD.—A new invention for washing was presented by Mr. J. Pullen, of China. This consisted of a plate of copper or zinc, fluted in the form of our common wash-boards, and affixed to a board of suitable size. This invention is neat, smooth, and durable; and the Chairman of the Committee, having used it in his family, can cheerfully recommend it to the public as being a useful implement—not wearing rough nor rusting. We would recommend that a gratuity be given Mr. Pullen for his invention.—[Kennebec Agri. Soc.]

TURNPIKE ROADS.—A plan has been for some time under the consideration of government, and is likely to be brought into operation, which would be of considerable importance to travellers. It is proposed, along the line of mail roads throughout England, to erect laborers' cottages at a distance of one mile from each other, to be occupied by discharged soldiers having pensions; each man to have the care of one mile of road, to keep it in order, and render every assistance in case of accident. This plan will, of course, be connected with the long talked-of abolition of turnpikes and road-trusts, in many instances a great nuisance, which are generally leased out to speculators, who, in some instances, receive double the amount which is actually expended in the improvement of roads. The adoption of this plan will afford great protection to travellers; and, in case of accidents, assistance may always be obtained within the distance of half a mile. The inhabitants of each cottage will be provided with every necessary to render assistance in case of accidents or robberies, and will also be provided with a large bell, to give an alarm along the road in case of need.—[London paper.]

RICE TO FATTEN FOWLS.—Rice and skimmed milk, heated until the rice swells, are said to fatten fowls very fast. It should be free from acidity, and consequently prepared every day. This food is said to be cheap, and to give a superior whiteness to the flesh.

ALTERNATE HUSBANDRY has been a principal means of converting one of the poorest counties of England, the county of Norfolk, into one of the most productive and wealthy. Most of this county possesses a sandy soil. Sixty years ago, summer fallows, according to Young, were common there, and fields were left in grass three years. At the close of the last century, according to the same writer, no such things as summer fallows were known, and grass was left but two years. The number of horses was lessened; ploughings were not so frequent, often but one for barley; and some trusted to mere scarifying, and succeeded well. This change of system had the effect to increase the product one-quarter and one-third. The same system is coming into operation upon our sandy soils, and with equal, if not greater advantage.

MARL IN NEW-JERSEY.—The Monmouth Enquirer remarks, that wherever this manure has been discovered in that and some of the southern counties of the State, a dozen blades of grass grow where none grew before; cold and barren fields have been made to bring forth luxuriant harvest; and lands have increased in some instances by this means $50 an acre. A proper geological survey of the State would probably lead to the discovery of many more marl-pits, for it appears that the farmers themselves have not become familiar with the external appearances which indicate their existence. Some simple process is also said to be very much needed to enable our farmers to discover what is and what is not marl, and what the quality and composition of the different species.

TO SAVE FRUIT TREES INJURED BY MICE.—A correspondent of the Genesee Farmer had a choice apple tree peeled by mice, six inches above ground. By heaping earth above the peeled part, he eventually succeeded in saving the tree.

SCYTHE SNEATHS.—Mr. Silas Lamson of Cummington, has a great reputation for good scythe sneaths. He employs about fifteen hands, and makes nearly two hundred a day. He intends to manufacture fifty thousand a year, and the proceeds of his sale will not fall much short of $25,000 annually! This is but one specimen of Yankee thrift and industry.

HYDROPHOBIA IN A HORSE.—A few days previous to the 2d Nov., says the Allegany Republican, a dog belonging to Mr. Culver, of this village, was observed to be unwell, showing evident symptoms of *Rabies Canina*, but not suspected as such at any time by the family. On the 2d, while accompanying Mr. C.'s team, he bit one of the horses severely in the nose; the wound bled freely, and healed. On the 28th, (26 days after the bite,) the horse was seized with the disease, and died on Wednesday morning the 3d, showing throughout as well marked a case of hydrophobia in this animal as any on record. The annals of medical science do not furnish a more extraordinary nor interesting example of muscular power than was witnessed in this case, the animal having, (while laboring under a violent spasm,) actually fractured one of his legs above the gambril joint, solely by the violent action of the muscles. This would appear incredible, if there were not several persons present at the time it occurred. The dog left home the next day after biting the horse, and was shot at Mr. Church's, where he bit several dogs and fowls.

USES OF THE POTATO.—In the December number of the Edinburgh Quarterly Journal of Agriculture, Mr. R. McAdam gives an article on the history and uses of the potato. Although this vegetable was known to Europeans soon after the discovery of America, yet, for more than 100 years, its merits were unknown to the public. Not until about the middle of the 18th century, was it cultivated as a field crop in Great Britain. It has since been rapidly spreading over the civilized world. Now, millions and millions of bushels are annually cultivated. In a comparatively few years, it will be cultivated in other vast and populous portions of the globe; and thus, even the present immense quantity will be many times quadrupled. We make a few extracts on the uses of the tuber.

Cooking Potatoes in various ways.—There is perhaps no species of food that can be consumed in a greater variety of ways, than the potato. Among us, the only modes in use are three or four, such as boiling, roasting, or frying; but our French neighbors, who surpass us, and all the world, in every thing relating to cookery, at least so far as infinite variety is concerned, have several other ways of preparing this root. A French gentleman invited to dinner thirty-two of his friends, promising to each a different dish, and yet all composed of the same material. They assembled, found before each dish a cover, and, upon taking their seats, discovered that each guest had really a different dish, though all formed of eggs! One of the company immediately repeated the invitation to all the persons present for next day, when he promised to regale them in a similar manner, on another single substance, metamorphosed into thirty two different forms. They came and dined very comfortably on thirty-two distinct and palatable dishes, all composed of potatoes.

Frosted Potatoes.—It is a very remarkable circumstance, that in *frosted* potatoes, it is only the *juice*, or liquid part of the root, that is affected, and not at all the farina or flour, which may be equally well extracted, and will be found as white and good as if it had not been frozen, provided the root is not quite rotted, which in process of time it will become. The following singular illustration of this took place in 1794: A field of potatoes at Camstradden, in Dumbartonshire, was laid under water, by a sudden rise of Lochlomond. A quantity of these was got up, and in part brought home. Being wet, they were laid on the floors of outhouses to dry; but in a few days they were so spoiled as to be unfit for feeding cattle. A heap of the potatoes was left on the ground; when turned over next spring, some starch was found at the bottom, which excited a suspicion, that though the root had been affected by the frost, yet that the flour had remained uninjured. This was found to be the case; and a quantity of the farina was collected from the heap, part of which was distributed in Dumbartonshire, and the remainder was brought to Stirling, in 1804. As arrow-root had become fashionable about that time, it was often used as a substitute, and many ate of it without knowing the difference. In 1825, a dish of it was made with milk, and two gentlemen who supped on it, declared that they would not have known it from arrow-root. A specimen of this same flour of 1794 was sent to Sir John Sinclair in 1826, and it seemed as good as any produced from the potatoes of that year, after having been kept for above thirty years.

Potato Starch in Bread.—It is well known that the manufacture of bread, even when conducted by the most skilful and experienced bakers, is sometimes very difficult. From the various casualties to which wheaten flour has been liable, from disease in the crop, or bad management in the keeping or grinding of the grain, it frequently loses some of its most essential qualities, and causes the bread, in defiance of the baker's art, to contract a sourness, which is both disagreeable to the taste and prejudicial to health. Fortunately, a remedy has been discovered of late years: that of mixing with the flour a small quantity of *potato starch, previously converted into a jelly.* This kind of bread is remarkably light, and keeps longer moist than any other bread. It toasts much better, and makes better bread puddings.

Potato Flour for Children.—Another most important use to which potato flour can be applied, is to give it, boiled in milk, in the proportion of *two* spoonfuls of flour to one pint of milk, to young children, brought up by hand, and not at the breast, or after they are weaned from the breast.

Potato Starch for Weavers.—Until of late, this was entirely made from wheat, and still a great proportion of it is so. But if potato starch were universally adopted for the purpose, as is the case now throughout France, a very great consumption of wheat would be saved. This substance is also put to another use, namely, the making of size, which, for some purposes, such as white-washing, is greatly superior to common size, as it has no offensive smell, and has a more durable whiteness.

Potato Cheese.—The manufacture of this is carried on in Thuringia and Saxony, and it has the advantage of retaining its freshness for several years, provided it be kept in close vessels. It is prepared by boiling the potatoes, and reducing them, when cold, to a pulp, rejecting the skins. Sour milk is added, or else sweet curd with the whey pressed out, in the proportion of a pint to 5 lb. of pulp. It is kneaded several times, drained in small baskets, and simply dried in the shade.

Coffee from Potatoes.—A mode has been suggested by a French chemist for converting potatoes into a substance resembling coffee. He mixes some best olive oil with a certain portion of dried potato flour, and then adds a small quantity of coffee-powder. He asserts that this will produce a liquor more agreeable than coffee.

Potatoes used for Dyeing and Cleansing.—A chemist in Copenhagen has discovered that the flowers of the plant may be used in dyeing. By this means a beautiful yellow color may be obtained, which is solid and durable. By plunging the color into blue, it becomes a perfect green. It has likewise been found, that the juice contained in the potato will produce a grey color of great beauty. The liquor drawn off in the process of making potato starch, will clean silks, woollens, or cottons, without damage to the texture or color. It is also good for cleaning wainscots.

Potatoes prevent Incrustations in Steam Boilers.—Potatoes are used with excellent effect in the boilers of steam engines, for preventing the gathering of a calcareous incrustation on the bottom, which is gradually deposited from the water employed. The potatoes give out a glutinous substance which entangles the particles in the water, and prevents them from incrusting the iron of the boiler.

Potatoes a cure for the Scurvy.—A medical use of the potato has been lately suggested in a valuable French publication; namely, as a preventive of, and even cure for, the scurvy. Roasted potatoes were administered with perfect success to sailors afflicted with the disorder, after other approved medicines had been given in vain. As *roasted* potatoes are the most effectual, it seems probable that the remedy depends on some of the substances contained in the black liquid which boils out of potatoes, and which is retained in roasting.

FIRE FROM ASHES.—Some time in the month of November, passing a neighbor's barn, we discovered the straw on the dung heap, which was heaped up against the barn, to be on fire. In a few minutes the building would have been in flames. The fire was occasioned by hot ashes thrown on the heap. The following spontaneous combustion from ashes is from a lecture on heat, by Prof. SMITH, formerly of New-Haven.

"Perhaps there are few people who are acquainted with the fact that ashes made by burning hard wood, such as ash, maple, &c., in a fire place, and taken up dry, are capable of producing spontaneous combustion, simply by receiving a degree of moisture, or by coming in contact with a wet board or stave, or being exposed to a very damp atmosphere. It is generally believed when fire is kindled by ashes, that it is caused by coal being put away with the ashes while on fire; but this is a mistake. The coals, if they were on fire, when buried in ashes, and excluded from atmospheric air, would soon be extinguished, or if they were not, they could not kindle fire with the atmospheric air excluded. The spontaneous combustion of ashes proceeds from a very different principle.

"Hard wood ashes, when they are first made, and while they are kept dry, contain a metal called potassium, which is the basis of potash. This metal is very combustible, and has so strong an affinity or attraction for oxygen, the supporter and cause of combustion, that it takes oxygen from water, the moment that it touches it, and burns with a vivid flame, and the product of this combustion is potash, that is, potassium saturated with oxygen, or what may be called the oxide of potassium. It should be noticed, too, that water is a compound of oxygen and hydrogen, and that when the potassium comes in contact with water, it takes the oxygen from it, and the hydrogen being set free increases the combustion. The simple explanation then is this: dry ashes, when first burnt, contain in them a metallic substance, which is highly inflammable, and which is set on fire by moisture. Quick lime and water produce heat sufficient, in some instances, to set wood on fire, but ashes and water produce a much more intense heat. In adding water to ashes there is a real combustion of the metal contained in the ashes; the metal being a combustible substance, requiring nothing but the oxygen of water to set it on fire."

CUT POTATOES ROT ON DUNG.—As a corroboration of what I have stated, I may mention, that a neighbor, Mr. Seeds, has three fields of potatoes, one-half of which has failed. He mentioned his loss to me, and on examining the crop, we found all the sets which had been placed with their cut surfaces on the dung, rotten, while the most forward and vigorous plants had the round uncut side next the dung.—[Transactions of Highland Soc.]

SOME ACCOUNT OF THE FAIRS IN SCOTLAND.—The Edinburgh Journal of Agriculture contains a notice of some of the Fairs in Scotland. The readers of the Farmer will come to the conclusion, that we in this country are far behind the Scots, or that our circumstances are not such as to be benefitted by such associations. We recommend the following few abridged extracts to those who see the importance of such fairs in the United States, and particularly in this city.

Kirkyetholm is a small village, situate in the valley of Beaumont Water, in the parish of Yetholm.

Kirkyetholm Fair.—This is held on the 27th of June. The number of cattle shown seldom exceeds 200 to 300, a small proportion of which are fat, and generally bought by the Morpeth dealers. The great proportion are half-fat and lean short horn steers and heifers for grazing, milch cows, &c. The grazing cattle are principally bought by the Yorkshire dealers; the milch cows, newly calved, and to calve, by the Edinburgh cow dealers; and the younger cattle for country use. But this is principally a sheep fair, from 8000 to 10,000 of which being generally shown, principally lean and rough Cheviot hoggs and wethers for grazing.

Town Yetholm Lamb and Wool Fair is held on the 5th of July. There are generally about 10,000 lambs shown here, about one half of which are Leicesters, the remainder Cheviot, and half-breed between the Leicester and Cheviot. This is allowed to be the best fair for lambs, in point of quality, in the south of Scotland.

Yetholm Autumn Fair is held on the 31st of October, when about 2000 sheep are shown, principally Cheviot ewes and wethers, which are mostly bought by farmers and graziers in the neighborhood, and adjoining counties.

Kelso Markets.—Kelso is a considerable town, beautifully situate on the north bank of the Tweed, near to the spot where it receives the Teviot. It contains 4939 inhabitants. It is 42 miles south from Edinburgh, on the great road from Newcastle to Edinburgh by Wooler and Coldstream.

Kelso Monthly Markets.—These are now the most important markets in Kelso, and are now held on the second Friday of every month throughout the year. They were instituted by the Border Union Agricultural Society. The quantity of stock shown is generally greater than at Coldstream; but the latter place has the advantage in regard to quality and weight, though much fine stock may be occasionally seen throughout the year at Kelso, and it is pleasing to reflect that they are improving every year.

Kelso St. James' Fair is held on the 5th August, about two miles on the south side of Kelso, on a beautiful flat piece of ground, called Fleurs' Haugh. Some years ago a large quantity of cattle was shown at this fair, but in consequence of the influence of the monthly markets, the show has of late years dwindled away very much. There is now not more than 300 to 400 cattle shown, very few of which are fat; the largest proportion consisting of half-fat and lean short horn steers and heifers, half-fat north country cattle, milch cows, &c.

Kelso Horse Markets.—These are held on every Friday in March, but the first and second are the principal, and constitute, particularly the second one, the largest horse fairs in the south of Scotland. Horse dealers from a great distance, both from the north and south, attend these markets, Many first-rate horses for the field, the road, and the draught, are exhibited here, and frequently fetch high prices. As may be expected in such markets, horses of the meanest as well as the highest description may be seen; indeed every species of customer, from the nobleman to the tinker, may gratify his taste at these fairs.

St. Boswell's Fair.—St. Boswell's Green is near the small village of Lesudden, in the parish of the same name, and is situate ten miles west from Kelso, and four miles east of Melrose. The only fair at St. Boswell's is a large and important one, and is held on the 18th of July. Ten or twelve years ago this was the largest lamb and sheep fair in the south of Scotland, generally about 30,000 being shown, but of late it has fallen off very much in point of numbers. The greater part of the Cheviot lambs that used to be brought to St. Boswell's is now shown at Melrose Fair on the 12th of August. The Selkirk and Peeblesshire farmers find it their interest to retain their lambs on the pasture of the high lands till the middle of August, because by that time vegetation is there in full vigor, and the lambs make a great improvement in size and condition during that time. The number may now be stated under 20,000, one third of which are Leicester, and one-third half-bred lambs.

Although this market has fallen off in numbers, it has decidedly improved in quality, the greatest proportion of the lambs shown now being Leicester and crosses.

This is among the last of the wool fairs; and it generally winds up the wool trade for the season.

Pennymoor First Border Tryst.—This market is held on the 31st July, principally for the sale of Cheviot lambs, and partly for wool, 6000 or 7000 being generally brought forward. Two-thirds of the number are half bred, and the remainder Cheviot lambs, and some fine lots of Cheviot wether hoggs. The Cheviot sheep at this fair are of the very best description, having been bred in the finest parts of the Cheviot Hills, where very great attention is paid to this species of stock.

Pennymoor Second Border Tryst is held on the 15th of October, for the sake of Cheviot ewes and young and old wethers, the numbers of which may be from 3000 to 4000.

Melrose Lammas Fair.—This fair is held on the 12th of August, and is entirely a lamb fair, and one of the largest of the south of Scotland, 30,000 being generally shown; and this year the numbers have increased to 50,000. Till within the last ten years the lambs were all of the Cheviot breed; but the spread of the Leicester, and the system of crossing, have now changed the appearance of this market. Nearly one-half of the lambs are now half-bred betwixt the Cheviot ewe and the Leicester tup; and a few are pure Leicester. Buyers from a great distance attend this market.

Jedburgh Monthly Markets.—In addition to the old established markets at Jedburgh, a few years ago monthly markets were established similar to those at Kelso and Coldstream. They commence in November and end in May. They are intended for cattle, though a few lots of sheep may be seen in them. The number of cattle, short horns, shown, is small in November and December, between 200 and 300 mostly fat, with a few half fat; but in January, February, March, April, and May, the numbers increase to 400 or 500, and sometimes as many as at Kelso in the same months. The cattle are nearly all fat, but their quality is not equal to those shown at Kelso or Coldstream.

Jedburgh Rood Fair.—This is held on the 25th September, or on the Tuesday, if the 25th falls on a Saturday, Sunday, or Monday, and is the largest fair held in Jedburgh. From 700 to 800 cattle are shown, two thirds of which are one, two, and three years old, half fat and lean short horn steers and heifers, mostly steers, fit for feeding off or wintering on half straw and turnips.

The breed of cattle has much improved in this district. Most of them are good growers and feeders, thrive well on good keep, and attain to heavy weights. The original breed in this district were large open boned cattle, and having been crossed with pure short horn bulls, their fattening properties have much improved.

Hawick Winter Market is held on the 8th of November, or Tuesday after, if the 8th falls on Saturday, Sunday, or Monday. From 600 to 700 short horn cattle are shown here, the greatest proportion of which are what are called *stirks*, or young cattle, about eighteen months old; some fat and half fat small Highland cattle, and short horn milch cows, calved and to calve, and a few barren cows. This is a famed market for young cattle; a great many of the farmers in this neighborhood selling their cattle at that age; and farmers in want of such come from a great distance to supply themselves.

CONSEQUENCE OF INTEMPERANCE TO A GARDENER.—We extract the following from the November number of the London Gardener's Magazine. It should serve as a lesson of warning to every gardener.

Our readers, if they will turn to vol. viii. p. 360, will find a letter from a journeyman gardener, a native of Ireland, who once worked for us at Bayswater; and who appeared delighted with America, and with the treatment which he received from his employer. His employer was equally satisfied with him; and, as we had sent him out, we were highly gratified at the result. We heard nothing of him afterwards till we received the following letter from his employer; which we publish without any names, as a caution to young gardeners. Poor ——, whom you sent to me some three years since, in the course of the first year fell in with some old acquaintances from Ireland, and became very intemperate. He finally lost all his money, in some drunken frolic, was arrested, and sent to the city watch-house from Saturday night until Monday morning, when he was discharged on paying a trifling fine for being drunk. Through shame and vexation, he enlisted in a company of our army, then on its march to our northwestern frontiers, against hostile Indians. The troops were attacked with the cholera before they reached the Mississippi. Many died, and great part of the remainder dispersed through the country. Some died miserably in the woods, and others were never heard of after. I fear poor —— died; but I can ascertain that fact (if known at our war-office,) should he have relatives to enquire after him. R.

Philadelphia, July 7.

FOOD CONSUMED BY A COW. — Moubray states that the average annual consumption of a cow is from one to one and a half acres of grass, and from a ton to a ton and a half of hay.

Mr. Nutt's System of Bee Management.

[From the London Mechanics' Magazine.]

MR. EDITOR,—After the notice of Mr. Nutt's intended publication of a Treatise on the Management of Bees, I anxiously waited for its appearance, and became possessed of a copy. After reading it through I wrote him a long letter, inquiring the cause of the opposition he stated he had met with, and offering my services gratuitously to introduce his system in the West of England. This letter Mr. Nutt (in an answer to a letter sent subsequently to his agent in London,) says he never received, and as the dead letter office has not returned it, the inference is, that it must have been improperly intercepted by some one—by one of those, perhaps, whom Mr. Nutt classes as his very "particular friends." Be this as it may, a misunderstanding between us has been the consequence, and our correspondence has ceased. I shall say little now, either of Mr. Nutt as an author, or of his friends who defend him. My purpose in addressing you is simply to state a few facts favorable to Mr. Nutt's system, which have come within my own experience, and which seem to me to invalidate the principal objections brought against it by your anonymous correspondent J. P. T. Nor should I have condescended to answer a person who seems afraid to be known in his attacks on an inoffensive individual, were it not that the Editor of the Mechanics' Magazine has in a manner identified himself with J. P. T., by the note which he has subjoined to one of his communications.*

First, then, as to "swarming from necessity or choice." I have two sets of collateral boxes, one stocked on the 24th, the other on the 28th of May last. The bees have filled the first with combs and honey entirely. One side box is full of combs, and partly full of honey. The bell-glass is about one third full of combs, and partly supplied by honey also; my bell-glasses will contain twice as much as the largest I have seen from Mr. Nutt. From this it must be evident that my bees must have swarmed "from necessity," had I not prevented this by the "move" recommended by Mr. Nutt, or something else tantamount to it. That they did not *choose* to swarm is evident from the work they performed after an enlargement was granted them. The swarm in the second set of boxes has filled the centre box and the glass just the same as the other; added to which, each swarm has partly filled another box, and then returned to the colony. (See hereafter.)

Mr. Nutt's glass on the centre box is not an abandonment of "his so much lauded ventilating system," that glass being itself also ventilated.

The comparing Mr. Nutt's prevention of swarming to a farmer preventing his ewes having lambs is not good reasoning. If a farmer could make his ewes to produce mutton and wool without the butcher's knife, then the cases would be parallel; but Mr. Nutt's plan is to get the honey without killing the bees. The moment the bees become too numerous for the box where they are first located, they are permitted to enter another box that is empty; the full one has its contents removed, and again is replaced on the stool until wanted, and so on. How, then, can the comparison be borne out?

I do not know what Mr. Huish means by his bees being "very lively," when the thermometer fell 20° below freezing. My bees are never *very active* when the thermometer is 20° above freezing. I would also add, that I attribute my success in keeping bees, when many of my neighbors lose them, to the simple circumstance of mine being out of the influence of the sun during winter; in fact, my hives are for weeks, and even months together, as still as if no bees were in them.

In reference to *moving bees*, we pay no attention to it in this part of the country; we move them to suit our convenience, as in changing of residences, selling or exchanging hives, putting them out on the half, and so on—never supposing but what bees can find their way back to any place from whence they have once started; we always, when we do remove them, do so after they are quietly housed at night.

Your correspondent says, "Mr. Nutt has so mystified the description of his hive that no person in the world can understand it." Now mark this, sir: my boxes were all made with their appendages according to the directions and plates given in Mr. Nutt's Treatise, *since which* I have seen a set from Mr. Nutt, sent to a lady near Penzance, and I find that I have not mistaken him in any one point. So much, then, for your correspondent's acuteness of perception. Another striking proof of it is, that he cannot understand the size of the dividing tins to be inserted between the boxes, when preparing to take off a side box. Of what size should they be? Surely, long enough and wide enough to stop the communication between the two. Attend again to what he says of regulating the temperature: "After all the fuss, too, about thermometers, there is no mention made in this chapter, nor any part of the book, where they should be inserted into the hive." Why, into the ventilator, to be sure, which is a perforated tin tube placed there on purpose.

To show, further, how carelessly, as well as with what prejudice, your correspondent must have read Mr. Nutt's treatise, he calls a mere block, or door, if you please, a drawer in common with the feeder, which is a drawer. These block fronts I used this season to try the experiment of taking off a side box, in which I so far succeeded that I did not injure a SINGLE BEE, that I could discover. I introduce the dividing tins carefully and slowly between the boxes, as directed by Mr. Nutt, although your correspondent says Mr. Nutt gives no such directions. There is no frame-work needed to support the combs: this I have proved over and over in cottage hives, and never even put a pint hrough the crown, as some persons do. I have proved it also in the boxes and glasses to my entire satisfaction. My bees, on being admitted into a side box, will take possession without "coaxing" at all. I take the box, clean it well out, rub it with a little honey, the smell of which will remove all other, if any existed, though I know not that it is at all needful; but we always prepare cottage hives to receive a swarm by rubbing it with something to make it grateful to them. I should think in about two or three hours after the communication was opened, in the three cases I tried, bees to the quantity of good swarms took possession of the boxes, and remained quietly to work as in the boxes they before occupied.

I do not recollect Mr. Nutt saying "he cannot himself, without great difficulty, take a box away from his own hive." I had no difficulty, danger, or accident to myself or to the bees, in two experiments tried this season—the boxes with the combs still remain for inspection. Your correspondent also says, in reference to Mr. Nutt's letting a swarm hang with a sheet before them until evening, that "my bees with such treatment would have fled away." A man I know in Breage told me this summer that he has frequently shook his bees after he had returned from Wheel Vor, a distance of three miles, after six o'clock in the evening, and on one occasion they swarmed so early as nine o'clock in the morning. The first swarm of my own, alluded to above, swarmed and settled in an apple-tree, after which a messenger was procured, and sent to me then two miles off. I went myself, and shook them in Mr. Nutt's box for the first time. The reason was I had the key of the room in my pocket, and my friends could not get at the box. The man's bees, above noticed, were left so long because his wife was afraid of them, and his dwelling was in a lonely place.

The above are facts that may be doubted, but cannot be disproved. Another season, I may, if you desire it, favor you with my further progress; or I may, in the mean time, with your permission, point out some other matters your correspondent has very much erred in.

GEORGE WILLIAM WOOD.

Germo, near Helston, Cornwall, Oct. 1, 1834.

INDIA RUBBER MANUFACTURE.—From a communication in the National Intelligencer on the India rubber factory at Roxbury, Mass., we take the following paragraphs:

In one of the buildings up-stairs, we found them manufacturing hose for fire engines, small pipes for conducting water above ground, traces for carriages &c. This hose is made of stout duck,

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* Not so; we only so far sided with our correspondent, as to say that his strictures had led us to think less favorably of Mr. Nutt's system and his book than we originally did, and that these charges had not been met as they might and ought to have been, if *unfounded*, by the two other correspondents who undertook Mr. Nutt's vindication, and who, we may add, are persons that must be able, if any body can, to vindicate it most effectually.—ED. M. M.

coated with rubber and cemented with the same; so that neither needle or thread are used. It may be made of any strength, as you may treble the thickness of the duck. It promises to supersede the leather hose, being considered more pliable, perfectly water tight, and not so apt to be injured by being trodden upon. I could not but admire the ingenuity of the contrivance of a substitute for the roller to preserve the rotundity of the small pipe, namely, by pumping air into the cavity as they proceed, so as to keep it expanded. These pipes being made of several thicknesses of duck, remain of a cylindrical shape after being finished.

It is impossible to say to what useful purposes this elastic gum will be applied; it has opened a new era in the arts of life, and from its pliant nature it must, in many cases, be substituted for leather. To all who are exposed to wet or cold, it proves a safeguard; and its economy is equal to its utility, for at this factory a person may clothe himself in a suit of water-proof garments, of a handsome exterior appearance, for the small sum of eleven dollars. R. M.

Lunar Influence.—If the tides of the ocean are raised from their fathomless bed by the power of the silver moon, it is not too much to believe that the tides of the atmosphere are subject, in a great degree, to the same mysterious influence.

In tropical climates, especially, the power of the moon over animal and vegetable life is believed by many to be very great, and why not in other portions of the globe also? It is stated by a learned writer, that in Demarara there are thirteen springs and thirteen autumns every year; for so many times does the sap of the tree ascend to its topmost branches, and descend to the roots. For example, the *wallaba*, a resinous tree, common in Demarara, and somewhat resembling the mahogany, if cut down in the dark, a short time before the new moon, is one of the most durable woods in the world for building purposes; in that state attempt to split it and with the utmost difficulty it will be driven in the most jagged, unequal manner; cut down another tree of the same kind at *full moon*, and the tree, it is said, can readily be split into the finest smooth shingles, or into staves for making casks, but in this state, if applied to building purposes, it speedily decays. Bamboos as thick as a man's arm, if cut at the dark moon, will endure ten or twelve years; if at full moon, they will be rotten in two or three years; and thus it is with most of the forest trees. If these statements can be relied upon, they would seem to afford an important practical hint to those engaged in getting out and preparing shipping timber from extensive forests in our own country. Have any experiments ever been tried, or any facts noticed by ship-builders upon the subject? It is true, we believe, that the timbers of our public vessels oft-times rot while yet on the stocks, and before they are completed. May not the circumstance be attributed to the particular season and particular age of the moon when the timbers were felled in the forest.—[Portsmouth Journal.]

Animalcules.—"Having, at the request of Dr. Linnæus, (says Mr. Ellis, a writer in the Philosophical Transactions,) made several experiments on the infusion of mushrooms in water, in order to prove the theory that these seeds are first animals and then plants, it appeared evidently that the seeds were put in motion by very minute animalcules, which proceeded from the putrefaction of the mushroom, for by pecking at these seeds, which are reddish, light, round bodies, they moved them about with great agility in a variety of directions, while the little animals themselves were scarcely visible, till the food they had eaten discovered them. The satisfaction I received from clearing up this point, led me into many other curious and interesting experiments. The ingenious Mr. Needham supposes these little transparent ramified filaments, and jointed or coralloid bodies, (strung like coral beads,) which the microscope discovers to us on the surface of inert animal and vegetable infusions when they become putrid, to be zoophytes, or branched animals; but to me they appear, after a careful scrutiny with the best glasses, to be that genus of fungi called *mucor*, or *mouldiness*. Their vegetation is so amazingly quick that they may be perceived in the microscope even to grow and feed under the eye of the observer. Mr. Needham has pointed out to us a species that is very remarkable for its parts of fructification. This, he says, proceeds from an infusion of bruised wheat. I have seen the same species proceed from the body of a dead fly, which has become putrid by lying floating for some time in a glass of water where some flowers had been. This species of mucor sends forth a mass of transparent filamentous roots, from whence arise hollow stems, that support little oblong vessels, with a hole on the top of each. From these I could plainly see minute globules or seeds issue forth in great abundance, with an elastic force, and turn about in the water as if they were animated. Continuing to view them with some attention, I could just discover that the putrid water which surrounded them was full of the minutest animalcula, and that these little creatures began to attack the seeds of the mucor for food. This new motion continued the appearance of their being alive for some time longer; but soon after many of them arose to the surface of the water, remaining there without motion; and a succession of them afterwards coming up, they united together in little thin masses, and floated to the edge of the water, remaining there quite inactive during the time of observation."

Good Taste is nothing more than sound sense applied to matters appertaining to ornament and luxury. One of he first principles of sound sense or good aste is order, or that disposition of things which, by their being seen one after another in succession, contributes to the grand end or purpose in view. Now, one of the first principles of order is to proceed in regular gradation from less to greater, or from greater to less. Without this, it is evident there can be no order; for unless there be a reason for what was to go before, or come after, any particular point in the series, the result must necessarily be confusion. To apply the principle of graduation to the external and internal ornaments of a house, we should say that an ascending series is required from the ornaments on the exterior walls and fences to those on the furniture and finishing of the hall, staircase, and rooms within. Taking the highly enriched bronze railing of the Duke of Wellington's boundary fence as the lowest point in the scale of ornament, the rails for his staircase ought to be of gold and filigree work; and for his grates, fenders, and fire-irons, no metal that we know of would be sufficiently precious. Apply the same reasoning to the marble triumphal arch at Pimlico, and what shall we find costly enough for the chimney pieces of rooms of the palace to which it belongs?—[Loudon's Magazine.]

Bees.—Mr. Chandler: I believe it will be admitted, on all sides, that Lancaster county, in some things, is not easily beaten. I have been spending a few days with my friend T. G. Henderson, of Pequa, and last evening assisted him in taking and weighing, from a single hive of bees, one hundred and thirty-six pounds of the whitest and most delicious honey I ever laid my eyes on.

This may appear incredible to many, as a box of the common size would not contain more than half the quantity; what I have stated, however, is a fact; but instead of the common box, a flour cask was prepared for them, by sawing off about six inches, and putting cross sticks in the usual way, and in this they were hived in the early part of June last. Mr. H. says, he thinks he has in this way, more than once, taken over a hundred pounds from a single hive, but never saw any so well filled as the present.—[U. S. Gazette.]

Premiums—*Servants.*—Among the premiums awarded at the September meeting of the Manchester Agricultural Society, we notice one to a "farming man servant," for having conducted himself to the satisfaction of his employer, for the term of 52 years, and one to a "farmer's dairy woman," for making the greatest quantity of cheese in one year, in proportion to the number of cows, being 101 cwt. from twenty cows.

The Society is in a very flourishing condition, its funds exceeding by one thousand pounds any former period. Its advantages to the Agricultural interests are so decided and important, as proved by long experience, that we should like to see the subject more earnestly considered in this country, and the attention of the farmers, in our own State particularly, more fully awakened to its importance.—[U. S. Gaz.]

Affection.—Real and pure affection is always quiet and deliberate in its attention, and no man of refinement can long love a wife whose demonstrations of attachment are obtrusive and importunate.—[Mrs. Hale.]

POTATO CULTUR; *by T. A. Knight.*—The following letter upon this important subject has been addressed to the Editor of the Hereford Journal, by one of the most eminent practical agriculturalists of the present day: "Sir,—In a letter which I addressed to you in the last autumn, I stated that I had obtained a produce of potatoes equivalent to 964½ bushels and 3 lbs. (each bushel weighing 80 lbs.) per statute acre, and I then expressed an intention, which I now fulfil, of pointing out to your readers the means by which such an extraordinary crop was obtained, and by which, of course, other crops of equal magnitude may again be obtained, and I looked forward with confidence to obtaining in the present year a produce equivalent to 1000 bushels per acre of potatoes of first-rate quality. The first point to which I wish to direct the attention of the cultivator of the potato, is the *age of the variety;* for it has long been known that *every variety cultivated, gradually becomes debilitated, and loses a large portion of its powers of producing; and I believe that almost every variety now cultivated in this and the adjoining counties, has long since passed the period of its age at which it ought to have resigned its place to a successor.* No variety should ever be cultivated which uselessly expands itself in the production of seeds, nor even of full grown blossoms, unless it possess some valuable redeeming qualities. The distance of the intervals between the rows should be regulated wholly by the length acquired by the stems in each peculiar soil and situation, if the utmost length acquired by the stems be four feet, let the intervals between the rows be four feet also; and if the variety be of dwarfish habits, and its longest stems do not exceed two feet, intervals of two feet will be sufficient. The rows should be made to point from *north* to *south*, that the mid-day sun may be permitted to shine fully between them, for every particle of living matter which is found in the tuberous root of the potato plant has been generated in the leaves, (which act only when exposed to light,) and has *descended* beneath the soil. Each set should weigh *at least six ounces*, and they should never be placed at greater distances from each other than six inches from centre to centre, and a preference should be given to *whole potatoes*, when such can be obtained. If the growth of the plant be very dwarfish, four inches between the set, from centre to centre, will be preferable; and if the form of the potato be long and kidney-shaped, a good deal of advantage will be gained by placing them to stand upon their ends, that end which joined the parent plant being placed downwards. The largest produce will generally be obtained from varieties of rather early habits and rather low stature; there being in very tall plants much time necessarily lost in carrying the nutriment, which has been absorbed from the soil, up into the leaves, and down again in the state of living sap to the tuber. Varieties which have strong stems and erect form are to be preferred, because such are least subject to fall upon, and shade the foliage of each other. It is much more advantageous to incorporate the manure with the soil by means of the spade or the plough, than to put it in with the sets; for in the latter case, a large majority of the roots, during the summer and autumn, do not derive advantage from it. Early planting is, under almost all circumstances, best; and the period, except for some very peculiar varieties, should never be later than the middle of April. I possess, though at present in small quantities, necessarily, many new varieties, which promise to prove valuable both on account of the quantity and quality of their produce; and I shall be happy, as soon as I have the power, to make them useful to the public. I obtained in the last year from some of these, under culture with the plough, (the soil being shallow, and naturally poor, and manure not having been given in more than ordinary quantity,) a produce equivalent to more than 650 bushels of potatoes, of first-rate excellence, per acre, and a good deal larger produce from others of inferior quality, but I have not any reason to believe that I possess any variety which, either in quality for immediate human food, or in quantity for affording food to the inferior animals, has reached, or even approximated, the greatest state of excellence which the potato is capable of acquiring.—[Gardener's and Forester's Record.]

SMALL FARMS IN IRELAND—THE POOR MAN.—The following is from a prize essay by Mr. Blacker, on the management of landed property in Ireland. The picture of benevolence is a beautiful one, and shows, strikingly, how much better it is to encourage and assist, than to use violence.

"I have gone myself to see a poor man, a tenant of less than 4 acres of land, whose name and residence I can give if required, who was threatened with an ejectment, being, as well as I can recollect, two years and a half in arrear. I found him sitting with his feet in the ashes of a half extinguished fire, his wife and five children nearly naked; want and misery surrounding him on every side; his house and farm neglected; the fear of expulsion preying upon his mind and spirits, had destroyed his health, and there he was awaiting the beggary and starvation impending over himself and family, in a kind of listless sensibility. In short, the whole scene was that of actual despair, and the man was evidently in such a state, that he was incapable of any exertion whatever. Having satisfied myself that he was not wilfully slothful, I told him, he should not be turned out, if he would take heart and exert himself, and that he should be assisted with lime, if he would follow the instructions given him by the agriculturalist. As I explained to him the plan I had in view for his benefit, it was easy to see the feelings by which he was agitated. With tears in his eyes, he promised to do every thing I required, and I left him, to send the agriculturalist to point out what was first to be set about. He faithfully fulfilled his engagement, and did every thing as he was required; and, when his turnips were ripe, I lent him, out of the sum placed at my disposal for that purpose, some money to buy a cow; the family having previously lived on potatoes and salt, and for even this they were in debt. This was his commencement, and, in the short space of about eighteen months afterwards, I found his house clean and comfortable looking, and the place about it equally so; his three and a half acres all in a profitable state; in fact, I could not put my foot upon a spot that was not either in crop, or in preparation for one; and he, himself, with his health restored, actively employed in wheeling up earth in a wheelbarrow, from the bottom to the top of a hill in his land, where the soil was shallow, in which his daughter, a fine stout little girl, was helping him, pulling by a rope in front; and the whole was a picture of activity and successful exertion.

These two years have not been favorable for the farmer, but he has contrived to pay up all his arrears, and although his diet, and that of his family, is of necessity, at present, almost exclusively confined to potatoes and milk, they are all healthy, happy, and contented. Another year will, I expect, enable him to pay off all his debts, and then, between the produce of his loom, and the increased produce of his farm, he will be able to command almost all the comforts which people in his line of life are most ambitious of. His rent is £4 8s. 3d., which the butter from his cow will generally pay, leaving him his pig, his crop, and the produce of his loom to himself; and yet this is the same man, who, upon the same piece of land, and subject to the same rent, was so lately upon the verge of beggary and starvation."

A FARMER SHOULD BE A FLORIST.—The subjoined paragraph is from an Address before the Massachusetts Horticultural Society, by the Hon. JOHN C. GRAY.

I repeat it,—every farmer, and I may almost say, every man in the community, may be, if not a distinguished, yet a skilful florist. One would suppose that little else would be necessary to render us so, than the contemplation of the splendid example which nature has set us, in the profusion with which she has scattered over our land the choicest treasures of the vegetable world. America may be denominated the classic ground of the botanist; and, as the painter or sculptor visits Italy, to study the wondrous works of Raphael or Angelo, so to the admirer of magnificent and beautiful plants, no country can present more interesting objects than ours. None is endowed with a richer variety of indigenous productions; from the pine, whose summit seems lost in the clouds, to the velvet carpeting of mosses which overspreads the margin of the rivulet. We possess many wild flowers, which want no other recommendation than that of rarity, to entitle them to rank with the most costly exotics. Witness the stately Rhododendrons of Medfield, and the spicy Magnolias of Cape Ann. What spectacle can be more magnificent than that presented by our woods on the banks of the Connecticut, when their shady recesses are absolutely illuminated with the brilliant and clustered blossoms of the Mountain Laurel. Above all, what exotic can surpass our Pond Lily? a flower, rivalling in beauty the far-famed night-blooming Cereus,—possessing, too, a most delicious fragrance, which is altogether denied to its kindred in the Eastern world, and which is so delicate and ethereal, that all the power of chemistry is insufficient to arrest and retain it. The Rose has been long denominated, by the consent of the civilized world, the queen of flowers, and far be it from me to disparage her pretensions; but if the choice were now to be made, we might call upon her to divide, at least, her royal honors, with this splendid nymph of these western waters.

CHURNING.—In severe cold weather it is most convenient, and the best, to churn the milk, if the skimmed milk is not wanted in the family. Warm water should not be used, if it can possibly be avoided. Half a gill of good vinegar, mixed with a little warm milk, will expedite the coming of the butter. The mixture should be put in after the churn has been in operation a while. If every thing is in order, and in the proper condition, the butter will be produced without much labor.

A remarkable Pear Tree; Flat Stones at the Roots of Fruit Trees.—A friend, to whom we are much indebted for the favor, has sent us the following extract from an English publication:

Denton Hall. — At this hour the gray massy walls contrasted finely with the beauty and fertility around it. The East side is covered completely with ivy. The South, a noble pear tree completely covers—describing in fact the whole range of the building—in summer one sheet of blossom, in winter loaded with fruit. How many generations have enjoyed its fruit cannot now be well ascertained; an old man, who died recently at the age of 80, declared that when he was a boy it was as large then as now.

It is worth while to remark that when the present occupier of the hall was recently taking up the stumps of two very old fruit trees, he found at the bottom of each a large flat stone, evidently placed for the purpose of preventing the roots from striking downwards into the clay, and inducing them to shoot laterally into the light soil.

The plan of placing a large flat stone, with a layer or two of earth above, was not long since announced as a great discovery, a grand improvement in horticulture.

By the Editor.—The above article may give useful information to many who are by no means novices in the art of cultivating fruit trees. But persons may have announced the plan as a novelty, who really believed it to be such; and of their own invention. Different persons may invent or discover the same thing without intercommunication or knowledge of each other's discovery or intention. The Hon. J. Welles has, we believe, improved on the above mentioned practice. In a communication for the Mass. Agr. Repos. for Jan. 1825, Mr. Welles states his plan, and says: "It was in effect to lay aside and reserve the two upper strata, and remove about a foot of the gravelly or dead earth, and to replace that depth with small stones," &c. We should think small stones might be preferable because they would retain moisture, and present interstices to fibrous roots, at the same time prevent the descent of a large tap root. And the tree might be less liable to be blown over by wind than if it were founded on a flat rock, or an impenetrable pavement. — [New England Farmer.]

Care of Farming Tools. — A topic not yet sufficiently enforced on the attention of farmers, is the wasteful negligence evinced in the exposure of agricultural implements to the injuries of the seasons. The sleds curling and cracking by the side of the wall in summer, and the cart half buried in snow and seasoning in the winter storms, are symptoms of waste and extravagance, which ripen into a consumption, to be hastened to premature termination by the visits of the sheriffs. The whole secret of wealth consists in esonomy, and the prudent care of those small rills which, without great vigilance, are slipping through the chinks of the best woven purse; and it may be considered quite as safe to predict that none of these slovenly gentlemen will be prosperous, as to write in the style of the calendar soothsayers, through the printed pages of the month of January, "expect snow about these days." The price of the time lost, when it is most valuable, in putting the exposed articles in proper repair, not speaking of the cost of the materials and the interruption of business, would defray the expense of erecting ten such cheap sheds as would cover them from the storms, protect them from decay, and keep them ready for immediate use.—[Nat. Ægis.]

Comparison of Cotton and Hemp.—Mr. Hammond: The following contrast of the hemp and cotton plants, in an agricultural point of view, seems to the writer to be correct; but he has reason to believe that a great deal of incredulity exists in relation to it, otherwise more interest would be taken in eliciting a discussion upon the subject, and diffusing among the farmers of Hamilton and other counties of this state, correct information in relation to the superior value of their hemp lands when turned towards the production of that article.

Cotton.—It is *known* that *this plant*, when young, is one of the most delicate, and very liable to be destroyed by disease, not only in its incipient state, but at maturity, by the rot, the rust, the caterpillar, the frost, and storms of wind and rain, as is now experienced from those which occurred in the months of September and October of the present year. It is known that the average crop of the cotton lands of the states of Mississippi and Louisiana does not exceed 400 lbs. of ginned cotton, or one bale to the acre of that weight; and to realize that quantity, the best seasons and the best cultivation by hand and horse hoeing are required; that, in addition, a great deal of hand labor is required to pick it out of the pods lock by lock, to gain a bale fit for the market. And the average price per pound for the last ten years has not much, if any, exceeded to the planter ten cents per pound. And lastly, it is known to be an exhauster of the land, from the necessity that exists that the plant be permitted to come to maturity, unless the seed are rotted and returned to the soil.

Hemp.—This is *known* to be a very hardy plant, and though it requires good land to produce the heaviest crops, does not require, after the first preparation of the soil and seeding, very much additional labor in the cultivation. It is known that if it is cut, (as it always should be,) before the seed are ripe, when the lint only is wanted for market, that it exhausts the land but very slightly—and if the improved machinery for breaking, and the recently invented "Hemp Cutter," are employed, it can be taken off the land, dew rotted and broken, with as much despatch, and even more, than 1600 lbs. of cotton in the seed, (the quantity required to make a bale of 100 lbs.) can be packed, ginned, and baled. It is known that the average quantity of clean hemp per acre may be put down at 800 lbs. the maximum being 1000 lbs. and the minimum 600 lbs.; and that the average price of clean hemp for the last ten years at Maysville, Kentucky, has been $5 and about 10 cents per 112 lbs. It results, then, if these data be correct, that if 1000 acres of land be cultivated in hemp, it will produce 800,000 lbs. of clean hemp, worth $40,000, equal to the product of 1000 acres in cotton, producing a bale of 400 lbs., worth 10 cents per lb., or $40 per acre!

Should such facts as these be suppressed? Yet we hear very little, comparatively speaking, of the value of our hemp lands, and much of the great value of the cotton crop, and the facility of cultivating it. Is it not because the latter is cultivated on large estates by the employment of large capitals belonging exclusively to a few individuals, whose crops, worth say from 10 to $40,000 each, sounds larger; whereas, if divided among all those employed in producing them, would no longer show as they do when concentrated in a few individuals.

I will say nothing of the tobacco crop. I will leave the planters of that article in Boon and Campbell counties, in Kentucky, who have recently lost their crops by the frosts of September last, to contrast their labor and gains with those of the hemp grower of Mason county in that state, who is now selling his crop in this market and elsewhere, at $5, and more, and no delay. To say nothing further, it is known that these counties are scarcely within the tobacco region, as Mr. M'Duffie very correctly said of the sugar plant in Louisiana. *A Friend to Agricultural Improvement.*—[Cin. Daily Gazette.]

Irish.—Cobbett, in his travels through Ireland, complains of passing over large tracts of that fertile island, without finding a single field of turnips, mangel wurtzel, or cabbages. He says, the people are in such a miserable condition, that even the children and wives of what are called farmers, are not only nearly starved, but all but absolutely naked.

Flour of Slippery Elm.—At page 161, of our last volume, we inserted an article on this subject. Mr. G. Thorburn, of this city, has sent us a paper of this "superfine flour." It is prepared at New Lebanon, N. Y. We copy from the envelope the following:

"This flour is applicable to a variety of important uses. Experience, and the concurrent testimony of the most eminent physicians, prove it to be a valuable medicine in all inflammation of the mucous membranes; such as colds, influenza, pleurisy, quinsy, dysentery, stranguary, and inflammation of the stomach or bowels. It is also a pleasant, salutary medicine, and diet, in consumption.

"Mix a large spoonful of the flour with as much sugar; stir these in a tea cup of cold water, and season with nutmeg or any agreeable spice; pour this into a pint of hot water; boil, and it is finished. The jelly may be made thick or thin, and seasoned to suit the taste. It can be taken in the same quantity as the arrowroot; is as palatable, and far preferable as a medicine."

We prepared some, as directed above; but found it so adhesive and *slippery*, that it was next to impossible to raise any in a spoon to the mouth. Properly seasoned, we presume it would not be unpleasant to most persons.

Origin of Language.—A correspondent, with the signature of "Lawton" has sent us a long communication on this subject. Its length prevents its publication in the Farmer. He advocates the opinion that articulate conventional language had its origin in the wants of mankind; and hence accounts for the diversity of languages.

Musci, or Mosses.—There are about 40 genera, and 330 species of this class. They are called winter plants, and are found to cover mountains as high as perpetual snow. Growing in patches, they cover the most barren spots, and thus prepare the earth for other vegetation. When growing on trees, they protect them from the severity of the winter.

LIFE PROLONGED BY CIVILIZATION.—If we collect England, Germany, and France, in one group, we find that the average term of mortality, which in that great and populous region was formerly one in 30 people annually, is not at present more than one in 38. This difference reduces the number of deaths throughout these countries from 1,900,000 to less than 1,200,000 persons: and 700,000 lives, or one in eighty-three annually, owe their preservation to the social ameliorations effected in the three countries of western Europe, whose efforts to obtain this object have been attended with the greatest success. The life of man is thus not only embellished in its course by the advancement of civilization, but is extended by it and rendered less doubtful. The effects of the amelioration of the social condition are to restrain and diminish, in proportion to the population, the annual number of births, and in a still greater degree that of deaths; on the contrary, a great number of births equalled, or even exceeded, by that of deaths, is a characteristic sign of a state of barbarism. In the former case, as men in a mass reach the plenitude of their physical and social developement, the population is strong, intelligent, and manly; while it remains in perpetual infancy, whole generations are swept off without being able to profit by the past,—to bring social economy to perfection.—[Philosophical Journal.]

OBITUARY—*Rev. Dr. Carey.*—We deem our pages very appropriately occupied with the biography of this useful man. It cannot fail of being read with interest and profit by the mechanic and farmer in particular.

It becomes our painful duty to announce the death of the Rev. William Carey, Missionary at Serampore. In the death of Dr. Carey the Baptist Mission at Serampore has sustained an inestimable loss. Although he had come to the decline of life, his great learning, his piety, and his experience in the missionary life, rendered him, nevertheless, exceedingly valuable to the mission. William Carey was eminently a pioneer in the history of modern missions, and his death will be deeply felt and much lamented. We here subjoin a brief notice of his character and life, which has just reached us in the Sumachar Durpun, published at Serampore.—[Boston Watchman.]

We have to communicate intelligence today, which will be received with general lamentation, not only throughout India, but throughout the world. Dr. Carey has finished his pilgrimage on earth, having gently expired early last Monday morning. For several years past his health has been very infirm, and his strength has gradually sunk, until the weary wheels of nature stood still from mere debility, and not from disease. The peculiarly trying hot weather and rainy seasons of 1833 reduced him to such extreme weakness, that in September last he experienced a stroke of apoplexy, and, for some time after, his death was expected daily. It pleased God, however, to revive him for a little. During the past cold season, he could again take an evening and morning ride in his palanquin carriage, and spend much of the day reclining in an easy chair with a book in his hand, or conversing cheerfully with any friend that called. As, however, the hot weather advanced, he sunk daily into still greater debility than before: he could take no nourishment: he lay helpless and speechless on his bed, until his skin was worn off his body, and death was a merciful relief. His dearest friends could not but rejoice that his sufferings were ended, although they mourn his loss to themselves and to mankind.

The career which Dr. Carey has run, is worthy of most honorable notice. He was a man who stood prominently forward from the mass of the several generations of men with whom he lived; and both for his public and private character he deserves to be had in lasting remembrance. He was the son of a poor man, and entered life with a very defective education, and assigned to a business no where in high estimation, and peculiarly despised in this country: he was a shoemaker. These disadvantages, however, could not repress the energies of his mind; and it soon appeared that Divine Providence had other work for him to do, than that to which he seemed at first to have been consigned. A thirst for knowledge he manifested, in various ways, from his childhood; and, just as he was coming to manhood, it pleased God to draw his heart to Himself, which happy change in his character increased his pursuit of instruction. To understand the Word of God was the first object of his desire; and therefore he set himself to acquire a knowledge of the ancient languages in which it was written. Whilst he was yet laboring for his daily bread with the awl, he sought acquaintance with grammars and dictionaries: and he never left them till those compiled by himself had gained, by universal consent, an honorable place amongst the monuments of human learning. He was soon after settled as pastor of a church in Leicester.

In the mean time, as he became more acquainted with the condition of the various nations of the earth, by reading the narratives of voyagers and travellers, he felt great concern for the state of the heathen. So much was he affected thereby, that he resolved to leave all that was dear to him in his native land, for the purpose of preaching the Gospel to the heathen; and in 1792 a society was formed amongst his friends, and through his influence, at whose expense he came to Bengal with his family, and another missionary, in the end of 1793.

Dr. Carey came to India in a Danish ship, without obtaining the consent of the Hon. Company. To have sought it would have been useless, since the Indian Government were at that time as much opposed to the propagation of the Christian religion in India, as if they had thought their own faith to be false. When Dr. Carey came into Bengal, therefore, it was a principal object with him to conceal himself from the knowledge of Government; and for a little while he occupied himself in the cultivation of recently redeemed jungle lands near Takee, about forty miles east from Calcutta, and here he was exposed to much suffering. A few months afterwards, however, he was invited by the late Mr. Udney to take charge of an indigo factory, which he commenced between Malda and Dinagepore; and his colleague obtained a similar situation. Through the kindness of their employer, too, they obtained formal permission from Government to continue in India. Dr. Carey continued thus situated from 1794 to the beginning of 1800, during which time he applied himself diligently to the study of the Bengalee language, and then of the Sungskrit. He translated the Scriptures into Bengalee, preached the Gospel in it extensively, and supported several schools.

On the 10th of January, 1800, Dr. Carey came to Serampore, and united with Dr. Marshman, Mr. Ward, and others, lately arrived from Europe, in forming the mission which has since borne the name of this town. From the Serampore Government, and His Majesty the King of Denmark himself, Dr. Carey and his colleagues, from first to last, have received the most gracious protection and favor, with whatever jealousy they were in former days regarded by their own countrymen. In the first year of his residence at Serampore, Dr. Carey's translation of the New Testament was nearly all printed; and the first Christian converts from Hindooism in Bengal were baptized. The Christian church, which was then begun with a few individual believers in the Gospel, has now branched into about twenty-four churches in different parts of India.

In 1801, Dr. Carey was chosen as Bengalee Teacher in the newly instituted college of Fort William. He was afterwards appointed Professor of Sungskrit and Mahratta, and by this means he acquired an intimacy with learned pundits from all parts of India, through whom, in the course of years, he was enabled to translate the Scriptures into all the principal languages of Northern Hindoostan. For the students in the College, he had to compile grammars of the language he taught them, and after many years he completed his voluminous Bengalee Dictionary. By means of these and other works he became known throughout the world as an oriental scholar of the first eminence. He was not less celebrated as a man of science. Botany and Natural History he began to study long before he left England; and India opened to him a wide field of observation, which he examined with untiring assiduity from his first arrival until his strength utterly failed him. In these pursuits, he was the coadjutor and personal friend of Roxburgh, Buchanan, Hardwick, and Wallich, and the correspondent of several of the first men in Europe, with whom he was continually exchanging botanical treasures.

As a philanthropist, Dr. Carey is entitled to a high rank. He sought and gained the prevention of infanticide at Gunga Saugur. He was amongst the first, if not the first, that engaged in seeking the abolition of Suttees; and chiefly through his exertions, the Marquis of Wellesley left to his successors in the Government of India, a minute declaring his conviction that Suttees might and ought to be abolished. Had he continued in the Government, he would have abolished them. Dr. Carey also took an active part in attempting the establishment of a Leper Hospital in Calcutta. He was the founder of the Agricultural Society; and, indeed, scarcely any undertaking for the benefit of the country has been engaged in, of which he was not either a prime mover or a zealous promoter.

It was, however, as a Christian, a Missionary, and a translator of the Sacred Scriptures, that Dr. Carey shone pre-eminently. Their obligations to him in these respects the people of India have yet, in a great degree, to learn. They will, however, learn them, and future generations will arise to bless his name. All Bengalees, at least, may thank him for this; before his days, the Bengalee language was unknown, and had never been reduced to grammatical rule. Pundits would not write it, and there was scarcely a book in it worth reading. It is now rich, refined, and expressive; and scholarship in it is generally sought both by natives and foreigners; and to Dr. Carey, and the pundits whom he employed, and whose labors he directed, the change is principally owing.

Dr. Carey was born on the 17th August, 1761, and died on the 9th of June, 1834, full of years and honor.